U.S. DEPARTMENT OF COMMERCE
National Technical Information Service

PB-290 282

Air Pollution Regulations in State Implementation Plans: North Carolina

Abcor Inc, Wilmington, MA Walden Div

Prepared for

Environmental Protection Agency, Research Triangle Park, NC

Aug 78

PB 290282

United States
Environmental Protection
Agency

Office of Air Quality
Planning and Standards
Research Triangle Park NC 27711

EPA-450/3-78-083
August 1978

Air

EPA

Air Pollution Regulations in State Implementation Plans:
North Carolina

REPRODUCED BY
NATIONAL TECHNICAL
INFORMATION SERVICE
U. S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO.
EPA-450/3-78-083		PB 290 282

4. TITLE AND SUBTITLE	5. REPORT DATE
Air Pollution Regulations in State Implementation Plans: North Carolina	August 1978
	6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)	8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Walden Division of Abcor, Inc. Wilmington, Mass.	10. PROGRAM ELEMENT NO.
	11. CONTRACT/GRANT NO. 68-02-2890
12. SPONSORING AGENCY NAME AND ADDRESS Control Programs Development Division Office of Air Quality Planning and Standards Office of Air, Noise, and Radiation Research Triangle Park, NC 27711	13. TYPE OF REPORT AND PERIOD COVERED
	14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES
EPA Project Officer: Bob Schell, Control Programs Development Division

16. ABSTRACT
This document has been produced in compliance with Section 110(h)(1) of the Clean Air Act amendments of 1977. The Federally enforceable regulations contained in the State Implementation Plans (SIPs) have been compiled for all 56 States and territories (with the exception of the Northern Mariana Islands). They consist of both the Federally approved State and/or local air quality regulations as indicated in the Federal Register and the Federally promulgated regulations for the State, as indicated in the Federal Register. Regulations which fall into one of the above categories as of January 1, 1978, have been incorporated. As mandated by Congress, this document will be updated annually. State and/or local air quality regulations which have not been Federally approved as of January 1, 1978, are not included here; omission of these regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
Air pollution Federal Regulations Pollution State Implementation Plans		

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS *(This Report)*	
RELEASE UNLIMITED	Unclassified	
	20. SECURITY CLASS *(This page)*	22. PRICE PC/MF
	Unclassified	A05/A01

EPA Form 2220-1 (9-73)

EPA-450/3-78-083

Air Pollution Regulations in State Implementation Plans:

North Carolina

by

Walden Division of Abcor, Inc.
Wilmington, Massachusetts

Contract No. 68-02-2890

EPA Project Officer: Bob Schell

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Air, Noise, and Radiation
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

August 1978

IR

This report is issued by the Environmental Protection Agency to report air pollution regulations of interest to a limited number of readers. Copies are available, for a fee, from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161.

This report was furnished to the Environmental Protection Agency by Walden Division of Abcor, Inc., Wilmington, Mass. 01887, in fulfillment of Contract No. 68-02-2890. The contents of this report are reproduced herein as received from Walden Division of Abcor, Inc. The opinions, findings, and conclusions expressed are those of the author and not necessarily those of the Environmental Protection Agency. Mention of company or product names is not to be considered as an endorsement by the Environmental Protection Agency.

Publication No. EPA-450/3-78-083

INTRODUCTION

This document has been produced in compliance with Section 110(h)(1) of the Clean Air Act Amendments of 1977. The Federally enforceable regulations contained in the State Implementation Plans (SIPs) have been compiled for all 56 States and territories (with the exception of the Northern Mariana Islands). They consist of both the Federally approved State and/or local air quality regulations as indicated in the Federal Register and the Federally promulgated regulations for the State, as indicated in the Federal Register. Regulations which fall into one of the above categories as of January 1, 1978, have been incorporated. As mandated by Congress, this document will be updated annually. State and/or local air quality regulations which have not been Federally approved as of January 1, 1978, are not included here; omission of these regulations from this document in no way affects the ability of the respective Federal, State, or local agencies to enforce such regulations.

There have been recent changes in the Federal enforceability of parking management regulations and indirect source regulations. The October, 1977, appropriation bill for EPA prohibited Federal enforcement of parking management regulations in the absence of specific Federal authorizing legislation. Federally promulgated parking management regulations have, therefore, been suspended indefinitely. Pursuant to the 1977 Clean Air Act Amendments, indirect source regulations may not be required for the approval of a given SIP. Consequently, any State adopted indirect source regulations may be suspended or revoked; State adopted indirect source regulations contained in an applicable SIP are Federally enforceable. More importantly, EPA may only promulgate indirect source review regulations which are specific to Federally funded, operated, or owned facilities or projects. Therefore, the Federally promulgated indirect source regulations appearing in this document are not enforceable by EPA except as they relate to Federal facilities.

Since State air quality regulations vary widely in their organization, content, and language, a standardized subject index is utilized in this document. Index listings consist of both contaminant and activity oriented categories to facilitate usage. For example, for regulations which apply to copper smelters, one might look under sulfur compounds (50.2), particulate matter process weight (50.1.1), or copper smelters (51.15). Federal regulations pertaining to a given State immediately follow the approved State and local regulations.

Additionally, a summary sheet of the information included in each comprehensive document is presented prior to the regulatory text to allow one to quickly assess the contents of the document. Specifically, the summary sheets contain the date of submittal to EPA of each revision

to the SIP and the date of the Federal Register in which the revision was either approved or disapproved by EPA. Finally, a brief description or reference of the regulation which was submitted is also included.

This document is not intended to provide a tool for determining the enforceability of any given regulation. As stated above, it is intended to provide a comprehensive compilation of those regulations which are incorporated directly or by reference into Title 40, Part 52, of the Code of Federal Regulations. Consequently, the exclusion of a Federally approved regulation from this document does not diminish the enforceability of the regulation. Similarly, the inclusion of a given regulation (for example, regulations governing pollutants, such as odors, for which there is no national ambient air quality standards) in this document does not, in itself, render the regulation enforceable.

SUMMARY SHEET

OF

EPA-APPROVED REGULATION CHANGES

NORTH CAROLINA

SUBMITTAL DATE	APPROVAL DATE	DESCRIPTION
11/16/73	8/12/74	Indirect Source Reg. 9
4/1/74	8/12/74	Indirect Source Reg. 9
3/23/76	6/23/76	SO_2 & NO_2 STDS.
6/24/76	4/18/77	Visible Emission STDS. New Source Perf. STDS. Emission Monitoring of Stationary Sources
11/1/76	4/18/77	Miscellaneous Plan Revisions

FEDERAL REGULATIONS

Section No.	Description
52.1778	Prevention of Significant Deterioration

DOCUMENTATION OF CURRENT EPA-APPROVED
STATE AIR POLLUTION REGULATIONS

REVISED STANDARD SUBJECT INDEX

1.0 DEFINITIONS

2.0 GENERAL PROVISIONS AND ADMINISTRATIVE PROCEDURES

3.0 REGISTRATION CERTIFICATES, OPERATING PERMITS AND APPLICATIONS

4.0 AIR QUALITY STANDARDS (PRIMARY AND SECONDARY)

- 4.1 PARTICULATES
- 4.2 SULFUR DIOXIDE
- 4.3 NITRIC OXIDES
- 4.4 HYDROCARBONS
- 4.5 CARBON MONOXIDE
- 4.6 OXIDANTS
- 4.7 OTHERS

5.0 VARIANCES

6.0 COMPLIANCE SCHEDULES

7.0 EQUIPMENT MALFUNCTION AND MAINTENANCE

8.0 EMERGENCY EPISODES

9.0 AIR QUALITY SURVEILLANCE AND SOURCE TESTING

10.0 NEW SOURCE PERFORMANCE STANDARDS

11.0 NATIONAL EMISSIONS STANDARDS FOR HAZARDOUS AIR POLLUTANTS

12.0 MOTOR VEHICLE EMISSIONS AND CONTROLS

13.0 RECORD KEEPING AND REPORTING

14.0 PUBLIC AVAILABILITY OF DATA

15.0 LEGAL AUTHORITY AND ENFORCEMENT

16.0 HEARINGS, COMPLAINTS, AND INVESTIGATIONS

17.0 PREVENTION OF SIGNIFICANT DETERIORATION

18.0 AIR QUALITY MAINTENANCE AREA

19.0 - 49.0
RESERVED FOR FUTURE EXPANSION OF COMMON INDEX

50.0 POLLUTANT - SPECIFIC REGULATIONS

- 50.1 PARTICULATES
  - 50.1.1 PROCESS WEIGHT
  - 50.1.2 VISIBLE EMISSIONS
  - 50.1.3 GENERAL

50.2 SULFUR COMPOUNDS

50.3 NITRIC OXIDES

50.4 HYDROCARBONS

50.5 CARBON MONOXIDE

50.6 ODOROUS POLLUTANTS

50.7 OTHERS (Pb, Hg, etc.)

51.0 SOURCE CATEGORY SPECIFIC REGULATIONS

51.1 AGRICULTURAL PROCESSES (includes Grain Handling, Orchard Heaters, Rice and Soybean Facilities, Related Topics)

51.2 COAL OPERATIONS (includes Cleaning, Preparation, Coal Refuse Disposal Areas, Coke Ovens, Charcoal Kilns, Related Topics)

51.3 CONSTRUCTION (includes Cement Plants, Materials Handling, Topics Related to Construction Industry)

51.4 FERROUS FOUNDRIES (includes Blast Furnaces, Related Topics)

51.5 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - Particulates (includes Fuel Content and Other Related Topics)

51.6 FUEL BURNING EQUIPMENT (coal, natural gas, oil) - SO_2 (includes Fuel Content and Other Related Topics)

51.7 FUEL BURNING EQUIPMENT (oil, natural gas, coal) - NO_2 (includes Fuel Content and Other Related Topics)

51.8 HOT MIX ASPHALT PLANTS

51.9 INCINERATION

51.10 NITRIC ACID PLANTS

51.11 NON-FERROUS SMELTERS (Zn, Cu, etc.) - Sulfur Dioxide

51.12 NUCLEAR ENERGY FACILITIES (includes Related Topic)

51.13 OPEN BURNING (includes Forest Management, Forest Fire, Fire Fighting Practice, Agricultural Burning and Related Topics)

51.14 PAPER PULP; WOOD PULP AND KRAFT MILLS (includes Related Topics)

51.15 PETROLEUM REFINERIES

51.16 PETROLEUM STORAGE (includes Loading, Unloading, Handling and Related Topics)

51.17 SECONDARY METAL OPERATIONS (includes Aluminum, Steel and Related Topics)

51.18 SULFURIC ACID PLANTS

51.19 SULFURIC RECOVERY OPERATIONS

51.20 WOOD WASTE BURNERS

51.21 MISCELLANEOUS TOPICS

TABLE OF CONTENTS

STATE REGULATIONS

Revised Standard Subject Index	Section Number	Title	Page
(1.0)	Section .0100	Definitions	1
(1.0)	.0101	Words	1
(1.0)	.0102	Phrases	1
(2.0)	.0103	Copies of Referenced Federal Regulations	3
(2.0)	Section .0200	Air Contaminant Sources	4
(2.0)	.0201	Classification of Air Contaminant Sources	4
(3.0)	.0202	Registration of Air Contaminant Sources	6
(8.0)	Section .0300	Air Pollution Emergencies	6
(2.0)	.0301	Purpose	6
(8.0)	.0302	Episode Criteria	7
(8.0)	.0303	Emission Reduction Plans	9
(8.0)	.0304	Preplanned Abatement Program	9
(8.0)	.0305	Emission Reduction Plan: Alert Level	10
(8.0)	.0306	Emission Reduction Plan: Warning Level	11
(8.0)	.0307	Emission Reduction Plan: Emergency Level	13
(4.0)	Section .0400	Ambient Air Quality Standards	15

Revised Standard Subject Index	Section Number	Title	Page
(2.0)	.0401	Purpose	15
(4.2)	.0402	Sulfur Oxides	16
(4.1)	.0403	Suspended Particulates	16
(4.5)	.0404	Carbon Monoxide	16
(4.6)	.0405	Photochemical Oxidants	17
(4.4)	.0406	Hydrocarbons	17
(4.3)	.0407	Nitrogen Dioxide	18
(2.0)	Section .0500	Emission Control Standards	18
(6.0)	.0501	Compliance With Emission Control Standards	18
(2.0)	.0502	Purpose	21
(51.5)	.0503	Control of Particulates From Fuel Burning Sources	21
(51.5)	.0504	Particulates From Wood Burning Indirect Heat Exchangers	22
(51.9)	.0505	Control of Particulates From Refuse Burning Equipment	23
(51.8)	.0506	Control of Particulates From Hot Mix Asphalt Plants	24
(51.1)	.0507	Particulates From Chemical Fertilizer Manufacturing Plants	24
(51.14	.0508	Control of Particulates From Pulp and Paper Mills	25
(51.21)	.0509	Particulates From Mica or Feldspar Processing Plants	25
(51.3)	.0510	Particulates: Sand, Gravel, Crushed Stone Operations	26
(51.21)	.0511	Particulates, SO (2) From Light-weight Aggregate Processes	27

Revised Standard Subject Index	Section Number	Title	Page
(51.3)	.0512	Particulates From Wood Products Finishing Plants	27
(51.3)	.0513	Control of Particulates From Portland Cement Plants	27
(51.4)	.0514	Control of Particulates From Ferrous Jobbing Foundries	28
(51.21)	.0515	Particulates From Miscellaneous Industrial Processes	29
(51.6)	.0516	Sulfur Dioxide Emission From Fuel Burning Installations	30
(51.18)	.0517	Emissions From Plants Producing Sulfuric Acid	30
(50.4)	.0518	Control of Hydrocarbon Emissions From Stationary Sources	30
(51.7)	.0519	Control of Nitrogen Dioxide Emissions	32
(51.13)	.0520	Control and Prohibition of Open Burning	32
(50.1.2)	.0521	Control of Visible Emissions	36
(50.6)	.0522	Control and Prohibition of Odorous Emissions	37
(51.9)	.0523	Control of Conical Incinerators	38
(10.0)	.0524	New Source Performance Standards	39
(11.0)	.0525	National Emission Standards For Hazardous Air Pollutants	41
(9.0) (13.0)	Section .0600	Air Contaminants; Monitoring, Reporting	42
(2.0)	.0601	Purpose and Scope	42
(1.0)	.0602	Definitions	42
(10.0)	.0603	Sources Covered By New Source Performance Standards	43

Revised Standard Subject Index	Section Number	Title	Page
(2.0)	.0604	Sources Covered By Implementation Plan Requirements	44
(50.1.2)	.0605	Wood and Wood Fossil Fuel Combination Units	46
(51.2)	.0606	Other Coal or Residual Oil Burners	47
(9.0) (13.0)	.0607	Exceptions To Monitoring and Reporting Requirements	48
(2.0)	.0608	Program Schedule	48
(3.0) (9.0)	.0609	Monitoring Condition in Permit	49
(2.0)	.0610	Delegation	49
(2.0)	Section .0700	Post Attainment Policy	49
(2.0)	.0701	Applicablity	49
(1.0)	.0702	Definitions	50
(2.0)	.0703	Source Categories	50
(15.0)	.0704	Enforcement Procedures	51
(2.0)	.0705	Documentation For Special Orders	53
(16.0)	.0706	Public Participation	54
(2.0)	.0707	Extensions	55
(10.0)	Section .0800	Complex Sources	56
(2.0)	.0801	Purpose and Scope	56
(3.0)	.0802	Permits	57
(12.0)	.0803	Highway Projects	57
(10.0)	.0804	Airport Facilities	58
(3.0)	Section .0600	Air Quality Permits	58

Revised Standard Subject Index	Section Number	Table	Page
(2.0)	.0601	Purpose and Scope	58
(1.0)	.0602	Definitions	60
(3.0)	.0603	Applications	61
(3.0)	.0604	Final Action on Permit Applications	62
(3.0) (15.0)	.0605	Issuance, Revocation and Enforcement of Permits	62
(2.0)	.0606	Delegation of Authority	63
(2.0)	.0607	Copies of Referenced Federal Regulations	63

FEDERALLY PROMULGATED REGULATIONS

Revised Standard Subject Index	Section Number	Table	Page
(17.0)	52.1778	Prevention of Significant Deterioration	65

NORTH CAROLINA ADMINISTRATIVE CODE

SUBCHAPTER 2D - AIR POLLUTION CONTROL REQUIREMTNTS

(1.0) SECTION .0100 - DEFINITIONS

(1.0) .0101 WORDS

The definition of any word used in Regulations of this Subchapter shall be the same as given in Article 21, Chapter 143 of the General Statutes of North Carolina, as amended. The following words which are not defined in said article, shall be construed to have the following meaning:

(1) "Dustfall" means particulate matter which settles out of the air and is expressed in units of grams per square meter per 30-day period.

(2) "Garbage" means any animal and vegetable waste resulting from the handling, preparation, cooking and serving of food.

(3) "Incinerator" means a device designed and engineered to burn solid, liquid, or gaseous waste material.

(4) "Opacity" means that property of a substance tending to obscure vision and is measured in terms of percent obscuration.

(5) "Refuse" means any garbage, rubbish, or trade waste.

(6) "Rubbish" means solid or liquid wastes from residences or dwellings, commercial establishments, or institutions.

(7) "Smoke" means small gas-borne particles resulting from incomplete combustion, consisting predominantly of carbon, ash, and other burned or unburned residue of combustible materials that form a visible plume.

History Note: Statutory Authority G.S. 143-215.3(a) (1);
143-213;
Eff. February 1, 1976.
Amended Eff. December 1, 1976.

(1.0) .0102 PHRASES

The definition of any phrase used in Regulations of this Subchapter shall be the same as given in Article 21, Chapter 143 of the General Statutes of North Carolina, as amended. The following phrases which are not defined in said article, shall be construed to have the following meaning:

(1) "Ambient air" means that portion of the atmosphere outside of buildings and other enclosures, stacks, or ducts, and which surrounds human, animal or plant life, or property.

(2) "Combustible material" means any substance which, when ignited will burn in air.

(3) "Fuel burning equipment" means equipment whose primary purpose is the production of thermal energy or power from the combustion of any fuel. Such equipment is generally that used for, but not limited to, heating water, generating or circulating steam, heating air as in warm air furnace, furnishing process heat entirely through transfer by fluids or transmissions through process vessel walls.

(4) "Open burning" means any fire wherein the products of combustion are emitted directly into the outdoor atmosphere and are not directed thereto through a stack or chimney, approved incinerator, or other similar device.

(5) "Particulate matter" means any material except uncombined water that exists in a finely divided form as a liquid or solid at standard conditions.

(6) "Rural area" means an area which is primarily devoted to, but not necessarily limited to, the following uses: agriculture, recreation, wildlife management, state park, or any area of natural cover.

(7) "Salvage operation" means any business, trade, or industry engaged in whole or in part in salvaging or reclaiming any product or material, including, but not limited to, metals, chemicals, motor vehicles, shipping containers, or drums.

(8) "Smoke density measuring device":

(a) Ringelmann Chart means the chart published and described in the U.S. Bureau of Mines, Information Circular 8333, and on which are illustrated graduated shades of grey to black for use in estimating the light obscuring capacity of smoke;

(b) The pocket size Ringelmann Chart and other adaptations commonly used by trained smoke inspectors;

(c) Other equivalent standards as may be approved by the commission.

(9) "Sulfur oxides" include sulfur dioxide, sulfur trioxide, their acids and the salts of their acids. For purposes of these ambient air quality standards, in Regulation .0402 of this Subchapter, measurements of sulfur dioxide, by the method specified herein, shall be taken to indicate the concentration of sulfur oxides.

(10) "Suspended particulate" means any material, except water in uncombined form that is or has been airborne, and is quantitatively expressed in concentration, i.e., micrograms per cubic meter.

(11) The term "act" means "The North Carolina Water and Air Resources Act."

(12) "Trade wastes" means all solid, liquid, or gaseous waste materials or rubbish resulting from combustion, salvage operations, building operations, or the prosecution of any business, trade, or industry including, but not limited to, plastic products, paper, wood, glass, metal, paint, grease, oil and other petroleum products, chemicals, and ashes.

History Note: Statutory Authority G.S. 143-215.3(a) (1);
143-213;
Eff. February 1, 1976;
Amended Eff. December 1, 1976

(2.0) .0103 COPIES OF REFERENCED FEDERAL REGULATIONS

Copies of applicable Code of Federal Regulations sections referred to in this Subchapter are available for public inspection at Department of Natural and Economic Resources Field Offices, air quality section. They are: Western Field Office, Interchange Building 159 Woodfin Street, Post Office Box 370, Asheville, North Carolina 28802; North Piedmont Field Office, 8003 Silas Creek Parkway Extension, Winston-Salem, North Carolina 27106; South Piedmont Field Office, 1119 North Main Street, Mooresville, North Carolina 28115; North Central Field Office, 3800 Barrett Drive, Post Office Box 27687, Raleigh, North Carolina 27611; South Central Field Office, Wachovia Building, Suite 714, Fayetteville, North Carolina 28301; Northeastern Field Office, 1502 North Market Street, Post Office Box 1129, Washington, North Carolina 27889; Southeastern Field Office, 3143 Wrightsville Avenue, Wilmington, North Carolina 28401.

Copies of such regulations can be made at these field offices for ten cents ($0.10) per page.

HISTORY NOTE: Statutory Authority G.S. 150A-14;
Eff. December 1, 1976.

(2.0) Section .0200 - AIR CONTAMINANT SOURCES

(2.0) .0201 CLASSIFICATION OF AIR CONTAMINANT SOURCES

(a) Purpose. This Regulation is for the purpose of establishing a system for classifying air contaminant sources which will be used by the commission for assigning an appropriate classification to air contaminant sources which the commission believes to be of sufficient importance to justify classification or control.

(b) Scope. This Regulation shall apply to all air contaminant sources, both combustion and non-combustion. The following system for classifying air contaminant sources is hereby established:

(1) "Class I-C" includes all sources of air contamination utilizing fuel burning equipment for the production of thermal energy for power generation for public utilization.

(2) "Class II-C" includes all sources of air contamination utilizing fuel burning equipment for the production of steam, and for other process used at commercial and industrial establishments.

(3) "Class III-C" includes all sources of air contamination utilizing fuel burning equipment for comfort heating at institutions, commercial or industrial establishments, or apartment houses having a central heating system serving more than four apartments.

(4) "Class IV-C" includes all sources of air contamination resulting from the burning of trash, rubbish, refuse or similar materials in incinerators, teepee burners, or similar devices.

(5) "Class V-C" includes all sources of air contamination resulting from the operation of fuel burning equipment for comfort heating.

(6) "Class VI-C" includes all sources of air contamination resulting from the operation of internal combustion engines.

(7) "Class I-I" includes all sources of air contamination resulting from industrial plants engaged in the manufacture of chemicals or allied products whose processes depend on the chemical reaction of two or more compounds and includes, among others, plants producing acids, fertilizer materials, dyestuff, synthetic fibers and industrial gases.

(8) "Class II-I" includes all sources of air contamination resulting from industrial plants engaged in the production of pulp and paper.

(9) "Class III-I" includes all sources of air contamination resulting from the mining and processing of minerals, stone, clay and cement products, and includes, among others, phosphate ore, mica and feldspar operations, stone quarries and crushers, cement plants, concrete mixing plants, and masonry block plants.

(10) "Class IV-I" includes all sources of air contamination resulting from industrial operations utilizing petroleum products, and includes, among others, asphalt mix plants, roofing felt plants, and petroleum products storage areas.

(11) "Class V-I" includes all sources of air contamination resulting from furniture, lumber, or wood product plants.

(12) "Class VI-I" includes all sources of air contamination resulting from textile manufacturing, textile dyeing or finishing plants.

(13) "Class VII-I" includes all sources of air contamination resulting from the shelling, drying, storage, ginning and processing of tobacco, corn, soybeans, peanuts, cotton, fruits, vegetables, or other agricultural products.

(14) "Class VIII-I" includes all sources of air contamination resulting from industries engaged in the porcessing of metals, and includes, among others, smelting, casting foundries, metal working, and other similar operations.

(15) "Class IX-I" includes all sources of air contamination resulting from slaughtering and processing meat, poultry, fish, and similar products, including, among others, plants or facilities for rendering or the recovery of by-products therefrom.

(16) "Class X-I" includes all sources of air contamination resulting from industries which do not fall within the above classifications and these sources shall be controlled pursuant to the requirements of regulations and other provisions of law.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (4);
Eff. February 1, 1976:
Amended Eff. December 1, 1976.

(3.0) .0202 REGISTRATION OF AIR CONTAMINANT SOURCES

(a) Purpose. This Regulation is to provide for the orderly registration of all air contaminant sources, as applicable regulations or emission control standards are adopted.

(b) Scope. This Regulation shall apply to all air contaminant sources both combustion and non-combustion, as set forth in Regulation .0201 of this Section, "Classification of Air Contaminant Sources," with the exception of classes V-C and VI-C.

(c) Within 60 days after the effective date of a regulation or emission control standard, all persons operating sources of such emissions shall register with the division of environmental management on forms to be made available by the division, the name of the person, company or corporation operating the sources, the address, location, county, and principal officer of the company.

(d) Within 60 days following receipt of the necessary forms, or as this date may be established by the Environmental Management Commission, information shall be supplied concerning the process or processes including, but not necessarily limited to, quantities and kinds of raw materials used, process flow sheets, operating schedules, total weights and kinds of air contaminants released, types and quantities of fuels used, stack heights, and such other information as may be considered essential in evaluating the potential of the source for causing air pollution.

(e) It shall be the responsibility of persons operating air contaminant sources to obtain from the division the needed registration forms.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (4)
Eff. February 1, 1976.

(8.0) SECTION .0300 - AIR POLLUTION EMERGENCIES

(2.0) .0301 PURPOSE

Notwithstanding any other provisions of air pollution control regulations or standards, this Section is designed to prevent the excessive buildup of air contaminants during air pollution episodes thereby preventing the occurrence of an emergency due to the effects of these contaminants on the public health.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976

(8.0) .0302 EPISODE CRITERIA

Conditions justifying the proclamation of an air pollution alert, air pollution warning, or air pollution emergency shall be deemed to exist whenever the Director, Division of Environmental Management, determines that the accumulation of air contaminants in any place is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a threat to the health of the public. In making this determination, the director will be guided by the following criteria:

(1) Air Pollution Forecast. An internal watch by the air quality section and local air pollution control agencies shall be activated by a National Weather Service advisory that an atmospheric stagnation advisory is in effect, or the equivalent local forecast of stagnant atmospheric conditions;

(2) Alert. The alert level is that concentration of pollutants at which first stage control actions are to begin. The alert will be proclaimed by the director when any of the following levels is reached at any monitoring site:

(a) sulphur dioxide -- 800 ug/m^3 (0.3 p.p.m.), 24-hour average;

(b) particulate -- 3.0 COHs or 375 ug/m^3, 24-hour average;

(c) sulphur dioxide and particulate combined -- product of sulphur dioxide p.p.m. 24-hour average, and COHs equal to 0.2 or product of sulphur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 65 x 10^3;

(d) carbon monoxide -- 17 mg/m^3 (15 p.p.m.), eight-hour average;

(e) oxidant -- 200 ug/m^3 (0.1 p.p.m.), one-hour average;

(f) nitrogen dioxide -- 11^{30} ug/m^3 (0.6 p.p.m.), one-hour average; 282 ug/m^3 (0.15 p.p.m.), 24-hour average; and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase or, in the case of oxidants, the situation is likely to reoccur within the next 24-hours unless control actions are taken.

(3) Warning. The warning level indicates that air quality is continuing to degrade and that additional abatement actions are necessary. A warning will be proclaimed by the director when any one of the following levels is reached at any monitoring site:

(a) sulphur dioxide -- 1600 ug/m^3 (0.6 p.p.m.), 24-hour average;

(b) particulate -- 5.0 COHs or 625 ug/m^3, 24-hour average;

(c) sulphur dioxide and particulate combined -- product of sulphur dioxide p.p.m., 24-hour average, and COHs equal to 0.8 or product of sulphur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 261 x 10^3;

(d) carbon monoxide -- 34 mg/m^3 (30 p.p.m.), eight-hour average;

(e) oxidant -- 800 ug/m^3 (0.4 p.p.m.), one-hour average;

(f) nitrogen dioxide -- 2260 ug/m3 (1.2 p.p.m.), one-hour average; 565 ug/m^3 (0.3 p.p.m.), 24-hour average;

and meteorological conditions are such that pollutant concentrations can be expected to remain at the above levels for 12 or more hours or increase or, in the case of oxidants, the situation is likely to reoccur within the next 24 hours unless control actions are taken.

(4) Emergency. The emergency level indicates that air quality is continuing to degrade to a level that should never be reached and that the most stringent control actions are necessary. An emergency will be declared by the Governor when any one of the following levels is reached at any monitoring site:

(a) sulphur dioxide -- 2100 ug/m^3 (0.8 p.p.m.), 24-hour average;

(b) particulate -- 7.0 COHs or 875 ug/m^3, 24-hour average;

(c) sulphur dioxide and particulate combined -- product of sulphur dioxide p.p.m. 24-hour average, and COHs equal to 1.2 or product of sulphur dioxide ug/m^3, 24-hour average, and particulate ug/m^3, 24-hour average, equal to 393 x 10^3;

(d) carbon monoxide -- 46 mg/m^3 (40 p.p.m.), eight-hour average;

(e) oxidant -- 1000 ug/m^3 (0.5 p.p.m.), one-hour average;

(f) nitrogen dioxide -- 3000 ug/m^3 (1.6 p.p.m.), one-hour average; 750 ug/m^3 (0.4 p.p.m.), 24-hour average.

(5) Termination. Once declared any level reached by application of these criteria will remain in effect until the criteria for that level are no longer met. At such time the next lower level will be assumed.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(8.0) .0303 EMISSION REDUCTION PLANS

(a) Air Pollution Alert. Any person responsible for the operation of a source of air contamination as set forth in Regulation .0305 of this Section, shall take all air pollution alert actions as required for such source of air contamination and shall put into effect the preplanned program for an air pollution alert.

(b) Air Pollution Warning. Any person responsible for the operation of a source of air contamination as set forth in Regulation .0306 of this Section, shall take all air pollution warning actions as required for such source of air contamination and shall put into effect the preplanned program for an air pollution warning.

(c) Air Pollution Emergency. Any person responsible for the operation of a source of air contamination as set forth in Regulation .0307 of this Section, shall take all air pollution emergency actions as required for such source of air contamination and shall put into effect the preplanned program for an air pollution emergency.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976.

(8.0) .0304 PREPLANNED ABATEMENT PROGRAM

(a) Any person responsible for the operation of a source of air contamination as set forth in Regulations .0305, .0306, or .0307 of this Section, or emitting 100 tons per year or more shall prepare a plan, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of an air pollution episode, and shall, by April 20, 1972, submit such plan to the commission for review and approval.

(b) Any person responsible for the operation of a source not set forth in Regulations .0305, .0306, or .0307 of this Section, shall, when requested by the commission in writing, prepare a plan, consistent with good industrial practice and safe operating procedures, for reducing the emission of air contaminants into the outdoor atmosphere during periods of air pollution alert, air pollution warning, and air pollution emergency.

History Note: Statutory Authority G.S. 143-215 .3 (a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976.

(8.0) .0305 EMISSION REDUCTION PLAN: ALERT LEVEL

(a) General

(1) There shall be no open burning by any person of trade waste, vegetation, refuse, or debris in any form.

(2) The use of incinerators for the disposal of any form of solid waste shall be limited to the hours between 12-noon and 4:00 p.m.

(3) Persons operating fuel burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12-noon and 4:00 p.m.

(4) Persons operating motor vehicles should eliminate all unnecessary operations.

(b) Source Curtailment. Any person responsible for the operation of a source of air contamination shall take all required control actions for this alert level as they are listed below:

(1) Coal or oil fired electric power generating facilities:

(A) substantial reduction by utilization of fuels having low ash and sulfur content,

(B) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing,

(C) substantial reduction by diverting electric power generation to facilities outside of alert area;

(2) Coal or oil fired process steam generating facilities:

(A) substantial reduction by utilization of fuels having low ash and sulfur content,

(B) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing,

(C) substantial reduction of steam load demands consistent with continuing plant operation;

(3) Manufacturing industries of the following classification: primary metals industry; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay, and concrete products industries:

(A) substantial reduction of air contaminants from manufacturing operations by curtailing, postponing or deferring production and allied operations;

(B) maximum reduction by deferring trade waste disposal operations which emit solid particles, gases, vapors, or malodorous substances;

(C) reduction of heat load demands for processing;

(D) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing;

(4) Municipal and commercial refuse disposal operations will take control action whereby substantial reduction is created by limiting burning of refuse in incinerators to hours between 12-noon to 4:00 p.m.;

(5) Other persons requested by the commission to prepare a pre-planned abatement plan shall take all required control actions for this alert level contained in their plan.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(8.0) .0306 EMISSION REDUCTION PLAN: WARNING LEVEL

(a) General

(1) There shall be no open burning by any person of trade waste,

refuse, vegetation, or debris in any form;

(2) The use of incinerators for the disposal of solid waste or liquid waste shall be prohibited;

(3) Persons operating fuel burning equipment which requires boiler lancing or soot blowing shall perform such operations only between the hours of 12-noon and 4:00 p.m.;

(4) Persons operating motor vehicles should minimize such use through car pools and increased use of public transportation.

(b) Source Curtailment. Any person responsible for the operation of a source of air contamination shall take all required control actions for this warning level as they are listed below:

(1) Coal or oil fired electric power generating facilities:

(A) maximum reduction by utilization of fuels having the lowest available ash and sulfur content,

(B) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing,

(C) maximum reduction by diverting electric power generating to facilities outside of warning area;

(2) Coal or oil fired process steam generating facilities:

(A) maximum reduction by utilization of fuels having the lowest ash and sulfur content,

(B) maximum utilization of mid-day(12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing,

(C) reduction of steam load demands consistent with continuing plant operations,

(D) making ready for use of a plan of action to be taken if an emergency develops;

(3) Manufacturing industries of the following classifications: primary metal industries; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay and concrete products industries:

(A) maximum reduction of air contaminants from manufacturing operations by, if necessary, assuming resonable economic hardship by postponing production and allied operations;

(B) maximum reduction by deferring trade waste disposal operations which permit particles, gases, vapors, or malodorous substances;

(C) reduction of heat load demands for processing consistent with continuing plant operations;

(D) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing;

(4) Municipal and commercial refuse disposal operations shall take control action whereby complete elimination of the use of incinerators is created;

(5) Other persons requested by the commission to prepare a preplanned abatement plan shall take all required control actions for this warning level contained in their plan.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(8.0) .0307 EMISSION REDUCTION PLAN: EMERGENCY LEVEL

(a) General

(1) There shall be no open burning by any person of trade waste, vegetation, refuse, or debris in any form;

(2) The use of incinerators for the disposal of any form of solid or liquid waste shall be prohibited;

(3) All places of employment described below shall immediately cease operations:

(A) mining and quarrying of nonmetallic minerals;

(B) all manufacturing establishments except those required to have in force an air pollution emergency plan;

(C) all construction work involving grading or other operations which generate dust;

(D) all wholesale and retail establishments except pharmacies and stores primarily engaged in the sale of food;

(E) all commercial and manufacturing establishments, automobile repair services and garages, laundries, barbershops, beauty shops and motion picture theaters;

(F) elementary and secondary schools, colleges, universities and professional schools;

(4) The use of motor vehicles is prohibited except in emergencies with the approval of local or state police.

(b) Source Curtailment. Any person responsible for the operation of a source of air contamination shall take all required control actions for this emergency level as they are listed below:

(1) Coal or oil fired electric power generating facilities:

(A) maximum reduction by utilization of fuels having lowest available ash and sulfur content,

(B) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing,

(C) maximum reduction by diverting electric power generating to facilities outside of emergency area;

(2) Coal or oil fired process steam generating facilities:

(A) maximum reduction by reducing heat and steam demands to absolute necessities consistent with preventing equipment damage,

(B) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing and soot blowing,

(C) taking the action called for in the abatement plan;

(3) Manufacturing industries of the following classifications: primary metals industries; petroleum refining and related industries; chemical and allied products industries; paper and allied products industries; glass, clay and concrete products industries:

(A) elimination of air contaminants from manufacturing operations by ceasing, curtailing, postponing or deferring production and allied operations to the extent possible without causing injury to persons or damage to equipment;

(B) elimination of air contaminants from trade waste disposal processes which emit solid particles, gases, vapors, or malodorous substances;

(C) maximum reduction of heat load demands for processing;

(D) maximum utilization of mid-day (12-noon to 4:00 p.m.) atmospheric turbulence for boiler lancing or soot blowing;

(4) Municipal and commercial refuse disposal operations shall take control action whereby complete elimination of the use of incinerators is created;

(5) Other persons requested by the commission to prepare a preplanned abatement plan shall take all required control actions for this emergency level contained in their plan.

History Note: Statutory Authority G.S. 143-215.3(a) (1);
143-215.3 (a) (12);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(4.0) SECTION .0400 - AMBIENT AIR QUALITY STANDARDS

(2.0) .0401 PURPOSE

It is the purpose of the ambient air quality standards, set out in this Section, to establish certain maximum limits on parameters of air quality considered desirable for the preservation and enhancement of the quality of the state's air resources. Furthermore, it shall be the objective of the commission, consistent with the North Carolina Air Pollution Control Law, to prevent significant deterioration in ambient air quality in any substantial portion of the state where existing air quality is better than the standards. An atmosphere in which these standards are not exceeded should provide for the protection of the public health, plant and animal life, and property.

Ground level concentrations of pollutants will be determined by sampling at fixed locations in areas beyond the premises on which a source is located. The standards are applicable at each such sampling location in the state.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (3);
Eff. February 1, 1976.

(4.2) .0402 SULFUR OXIDES

(a) The ambient air quality standards for sulfur oxides measured as sulfur dioxide are:

(1) 80 micrograms per cubic meter (0.03 p.p.m.) annual arithmetic mean,

(2) 365 micrograms per cubic meter (0.14 p.p.m) maximum 24-hour concentration not to be exceeded more than once per year,

(3) 1300 micrograms per cubic meter (0.5 p.p.m.) maximum three-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures published on April 30, 1971, in the Federal Register, Volume 36, No. 84.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (3);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(4.1) .0403 SUSPENDED PARTICULATES

(a) The ambient air quality standards for suspended particulate matter are:

(1) 60 micrograms per cubic meter annual geometric mean,

(2) 150 micrograms per cubic meter maximum 24-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures published on April 30, 1971, in the Federal Register, Volume 36, No. 84.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (3);
Eff. February 1, 1976.

(4.5) .0404 CARBON MONOXIDE

(a) The ambient air quality standards for carbon monoxide are:

(1) 10 milligrams per cubic meter (9 p.p.m.) maximum eight-hour concentration not to be exceeded more than once per year,

(2) 40 milligrams per cubic meter (35 p.p.m.) maximum one-hour

concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures published on April 30, 1971, in the Federal Register, Volume 36, No. 84.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (3);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(4.6) .0405 PHOTOCHEMICAL OXIDANTS

(a) The ambient air quality standard for photochemical oxidants measured and corrected for interferences due to nitrogen oxides and sulfur dioxide is 160 micrograms per cubic meter (0.08 p.p.m.) maximum one-hour concentration not to be exceeded more than once per year.

(b) Sampling and analysis shall be in accordance with procedures published on April 30, 1971, in the Federal Register, Volume 36, No. 84.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
I43-215.107 (a) (3);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(4.4) .0406 HYDROCARBONS

(a) The ambient air quality standard for hydrocarbons measured and corrected for methane is 160 micrograms per cubi c meter (0.24 p.p.m.) maximum three-hour concentration (6:00 a.m. to 9:00 a.m.) not to be exceeded more than once per year. This standard is a guide for use in devising plans to achieve oxidant standards.

(b) Sampling and analysis shall be in accordance with procedures published on April 30, 1971, in the Federal Register, Volume 36, No. 84.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (3);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(4.3) .0407 NITROGEN DIOXIDE

(a) The ambient air quality standard for nitrogen dioxide is 100 micrograms per cubic meter (0.05 p.p.m.) annual arithmetic mean.

(b) Sampling and analysis shall be in accordance with procedures published on April 30, 1971, in the Federal Register, Volume 36, No. 84.

History Note: Statutory Authority G.G. 143-215.3 (a) (1); 143-215.107 (a) (3);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(2.0) SECTION .0500 - EMISSION CONTROL STANDARDS

(6.0) .0501 COMPLIANCE WITH EMISSION CONTROL STANDARDS

(a) Purpose and Scope. The purpose of this Regulation is to assure orderly compliance with emission control standards found in this Section. This Regulation shall apply to all air contaminant sources, both combustion and non-combustion.

(b) After the effective date of any emission control standard, all sources of air contamination shall register with the division of environmental management in accordance with the provisions of Regulation .0202 of this Subchapter.

(c) In determining compliance with emission control standards, means shall be provided by the owner to allow periodic sampling and measuring of emission rates, including necessary ports, scaffolding and power to operate sampling equipment; and upon the request of the division of environmental management, data on rates of emissions shall be supplied by the owner.

(d) Testing to determine compliance shall be in accordance with the following procedures, except as may be otherwise required in Regulations .0524, .0525, .0603, and .0604 of this Subchapter:

(1) Procedures for selecting a suitable sampling site for particulate sampling and for determining the number of test points to be used for a given source shall be in accordance with Method 1 of Appendix A of 40 CFR 60. (CFR refers to Code of Federal Regulations.)

(2) Sampling procedures for determining compliance with particulate emission control standards shall be in accordance with Method 5 of Appendix A of 40 CFR 60, except that the

minimum time per test point for particulate testing shall be two minutes and the minimum time per test run will be one hour. However, a number of sources are known to emit organic material (oil, pitch, plasticizers, etc.) which exist as finely divided liquid droplets at ambient conditions. These materials can not be satisfactorily collected by means of the above method 5. In such cases the commission will reserve the option to require the use of Method 5 as proposed on August 17, 1971, in the Federal Register, Volume 36, Number 159.

(3) The procedures for determining compliance with sulfur dioxide emission control standards for fuel burning sources may be either through determination of sulfur content through fuel analysis or by stack sampling. If a source elects to demonstrate compliance by sulfur analysis in fuel, sampling of coal shall be in accordance with American Society of Testing and Materials (ASTM) Method D2234-72 and sampling of fuel oil shall be in accordance with ASTM Method D 270-65. Analysis of coal shall be in accordance with ASTM Method D3177-75, and analysis of fuel oil shall be in accordance with ASTM Method D 129-64. Combustion sources electing to demonstrate compliance through stack sampling shall follow procedures set forth in Method 5 of Appendix A of 40 CFR 60.

(4) Sulfuric acid manufacturing plants will demonstrate compliance with Regulation .0517 of this Section through the use of Method 8 of Appendix A of 40 CFR 60.

(5) All Other industrial processes emitting sulfur dioxide shall demonstrate compliance by sampling procedures as set forth in Method 6 of Appendix A of 40 CFR 60.

(6) Sampling procedures to demonstrate compliance with emission standards for nitrogen oxides shall be in accordance with the procedures set forth in Method 7 of Appendix A of 40 CFR 60.

(7) Each test (excluding fuel samples) shall consist of three repetitions or runs of the applicable test method. For the purpose of determining compliance with an applicable emission standard the average of results of all repetitions shall apply.

(8) In conjunction with performing certain test methods prescribed herein it will be necessary to determine gas composition with respect to carbon dioxide, oxygen, carbon monoxide and nitrogen for the purpose of determining the molecular weight of the

gas being sampled. Collecting a sample for this purpose shall be done in accordance with Method 3 of Appendix A of 40 CFR 60:

(A) The grab sample technique may also be used with instruments such as Bacharach Fyrite (trade name) with the following restrictions:

(i) Instruments such as the Bacharach Fyrite (trade name) may only be used for the measurement of carbon dioxide.

(ii) Repeated samples must be taken during the emission test run to account for variations in the carbon dioxide concentration. No less than four samples should be taken during a one-hour test run, but as many as necessary should be taken to produce a reliable average.

(iii) The total concentration of gases other than carbon dioxide, oxygen and nitrogen must be less than one percent.

(B) For fuel burning sources, concentrations of oxygen and nitrogen can be calculated from combustion relations for various fuels.

(9) For those processes for which the allowable emission rate is determined by the production rate, provisions must be made for controlling and measuring the production rate. It will be the responsibility of the source to ensure, within the limits of practicality, that the equipment or process being tested is operated at or near its maximum normal production rate or a lesser rate if specified by the Director, Division of Environmental Management, or his delegate. It will be the responsibility of the individual conducting the emission test to include with his test results data which accurately represent the production rate during the test. Heat input rates for fuel burning sources may be calculated from flue gas measurements. A method describing such a calculation is detailed in 40 CFR 60.45. This method requires the use of carbon dioxide or oxygen measurements, and a higher order of accuracy is necessary in these measurements than might be expected for a molecular weight determination. Therefore, the sampling and analytical methods acceptable for this purpose are limited to integrated sampling and Orsat analysis as describecd in Method 3 of Appendix A of 40 CFR 60. Data taken with instruments such as the Bacharach Fyrite (trade name) should only be used for corroborative purposes, but such use is recommended.

(10) Upon approval by the director or his delegate, test procedures different from those set forth herein may be used. Furthermore, the director or his delegate will have the option to prescribe alternate test procedures on an individual basis when he deems that such action is necessary to secure reliable test data.

(e) All existing sources of emission shall comply with applicable regulations and standards at the earliest possible date with all sources being in compliance within three years from the approval of the state's implementation plan by the federal government except as described in Section .0700 of this Subchapter. All new sources shall be in compliance prior to commencing operations.

(f) In addition to any control or manner of operation necessary to meet emission standards in this Section, any source of air contamination shall be operated with such controls or in such manner that the source shall not cause the ambient air quality standards of Section .0400 of this Subchapter to be exceeded at any point beyond the premises on which the source is located.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.68; 143-215.107 (a) (5); Eff. February 1, 1976; Amended Eff. April 1, 1977.

(2.0) .0502 Purpose

It is the purpose of the emission control standards set out in Regulations .0503 to .0509 of this Section to establish maximum limits or the rate of emission of air contaminants into the atmosphere. All sources shall be provided with the maximum feasible control.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.107 (a) (5); Eff. February 1, 1976.

(51.5) .0503 CONTROL OF PARTICULATES FROM FUEL BURNING SOURCES

(a) No person shall cause, suffer, allow, or permit particulate matter caused by the combustion of a fuel to be discharged from any stack or chimney into the atmosphere in excess of the hourly rate set forth in the following table:

Heat Input In Million BTU/Hour	Maximum Allowable Emission Of Particulate Matter In Lbs./Million BTU
Up to and Including 10	0.60
100	0.33
1,000	0.18
10,000 and Greater	0.10

For a heat input between any two consecutive heat inputs stated in the preceding table, maximum allowable emissions of particulate matter shall be calculated by the equation E = 1.090 times O to the-0.2594 power where F = maximum allowable emission of particulate matter in lbs./million BTU and O = heat input in million BTU/hour.

(b) For the purpose hereof, this Regulation applies to installations in which fuel is burned for the purpose of producing heat or power by indirect heat transfer. Fuels include those such as coal, coke, lignite and fuel oil, but do not include wood or refuse. When any products or by-products of a manufacturing process are burned for the same purpose, or in conjuction with any fuel, the same maximum emissions limitations shall apply.

(c) For the purpose of this Regulation, the heat input shall be the aggregate heat content of all fuel whose products of combustion pass through a stack or stacks. The total heat input of all fuel burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.5) .0504 PARTICULATES FROM WOOD BURNING INDIRECT HEAT EXCHANGERS

(a) No person shall cause, suffer, allow, or permit particulate matter caused by the combustion of wood to be discharged into the atmosphere in excess of the hourly rate set forth in the following table:

Heat Input In Million BTU/Hour	Maximum Allowable Emission Of Particulate Matter In Lbs./Million BTU
Up to and Including 10	0.70
100	0.41
1,000	0.25
10,000	0.15

For a heat input between any two consecutive heat inputs stated in the preceding table, maximum allowable emissions of particulate matter shall be calculated by the equation E = 1.1698 times Q to the -0.2230 power where E = maximum allowable emission of particulate matter in lbs./million BTU and Q = heat input in million BTU/hour.

(b) For the purpose hereof, this Regulation applies to installations in which wood is burned for the primary purpose of producing heat or power by indirect heat transfer.

(c) For the purpose of this Regulation, the heat content of wood shall be 8,000 BTU per pound (dry-weight basis), and the total heat input of all fuel burning units on a plant or premises shall be used for determining the maximum allowable amount of particulate matter which may be emitted.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.9) .0505 CONTROL OF PARTICULATES FROM REFUSE BURNING EQUIPMENT

No person shall cause, suffer, allow, or permit the emission of particulate matter from refuse burning equipment to be discharged from any stack or chimney into the atmosphere in excess of the hourly rate set forth in the following table:

Refuse Charged Lbs./Hour	Maximum Allowable Emission Of Particulate Matter In Lbs./Hour
0 to 100	0.2
200	0.4
500	1.0
1,000	2.0
2,000 and Above	4.0

For a refuse charge between any two consecutive rates stated in the preceding table, maximum allowable emissions of particulate matter shall be calculated by the equation E = 0.002 P where F = maximum allowable emission of particulate matter in lbs./hour and P = refuse charged in lbs./hour.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.8) .0506 CONTROL OF PARTICULATES FROM HOT MIX ASPHALT PLANTS

(a) No person shall cause, suffer, allow, or permit particulate matter resulting from the operation of a hot mix asphalt plant to be discharged into the atmosphere in excess of the rates set forth in the following table:

Aggregate Process Rate Tons/Hour	Maximum Allowable Emission Of Particulate Matter In Lbs./Hour
5	10
10	13
15	16
20	18
25	20
50	27
100	37
150	42
200	50
250	52
300 and Above	60

For rates between any two consecutive rates stated in the preceding table, maximum allowable emissions of particulate matter shall be calculated by the equation F = 4.9445 times P to the 0.4376 power where E = maximum allowable emissions of particulate matter in lbs./hour and P = aggregate process rate in tons/hour.

(b) All hot mix asphalt plants shall be equipped with a fugitive dust control system which shall be operated and maintained in such a manner as to reduce to a minimum the emission of particulate matter from any point other than the stack outlet.

(c) The owner or operator of the plant shall maintain dust control of the plant premises and access roads by paving, oil treatment, or other suitable measures.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.1) .0507 PARTICULATES FROM CHEMICAL FERTILIZER MANUFACTURING PLANTS

(a) No person shall cause, suffer, allow, or permit particulate matter caused by the manufacture, mixing, handling, or other operations in the production of chemical fertilizer materials to be discharged from any stack or chimney into the atmosphere in excess of the rates set forth in the following table:

Process Rate In Tons/Hour	Maximum Allowable Emission Of Particulate Matter In Lbs./Hour
10	19
20	23
40	29
50	31
100	38
500	61
1,000	78

For a production rate between any two consecutive rates stated in the preceding table, maximum allowable emissions of particulate matter shall be calculated by the equation E = 9.377 times P to the 0.3067 power where E = maximum allowable emission of particulate matter in lbs./hour and P = process rate in tons/hour.

(b) The process-weight rate for chemical fertilizer manufacturing operations shall be considered as the sum of the production rate and the recycle rate.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.14) .0508 CONTROL OF PARTICULATES FROM PULP AND PAPER MILLS

No person shall cause, suffer, allow, or permit particulate matter resulting from the production of pulp and paper to be discharged from any stack or chimney into the atmosphere in excess of the following:

	Maximum Allowable Emission Of Particulate in Lbs./Equivalent Ton Of Air Dried Pulp
Recovery Furnace Stack	3.0
Dissolving Tank Vent	0.6
Lime Kiln Stack	0.5

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.21) .0509 PARTICULATES FROM MICA OR FELDSPAR PROCESSING PLANTS

(a) No person shall cause, suffer, allow, or permit particulate matter caused by the processing of mica or feldspar to be discharged from any stack or chimney into the atmosphere in excess of the rates set forth in the following table:

Actual Process Weight Rate Tons/Hour	Maximum Allowable Rate Of Emission of Particulate Matter In Lbs./Hour
1	4.0
10	19.0
30	40.0
100	50.0
1,000	80.0
3,000	90.0

For process rates between 1 and 30 tons per hour, excluding 10 tons per hour, maximum allowable emissions of particulate matter shall be calculated by the equation E = 4 times P to the 0.677 power where E = maximum allowable rate of emission of particulate matter in lbs./hour and P = actual process weight rate in tons/hour. For process rates between 30 and 1,000 tons per hour, excluding 100 tons per hour, maximum allowable emissions of particulate matter shall be calculated by the equation E = 20.421 times P to the 0.1977 power where F = maximum allowable rate of emission of particulate matter in lbs./hour and P = actual process weight rate in tons/hour. For process rates between 1,000 and 3,000 maximum allowable emissions for particulate matter shall be calculated by the equation E = 38.147 times P to the 0.1072 power where E = maximum allowable rate of emission of particulate matter in lbs./hour and P = actual process weight rate in tons/hour.

(b) The owner or operator of the plant shall maintain dust control of the plant premises and access roads by paving, oil treatment, or other suitable measures.

(c) All stone crushing operations shall employ a water spray over the crusher or other dust control devices as may be approved by the commission.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.3) .0510 PARTICULATES: SAND, GRAVEL, CRUSHED STONE OPERATIONS

(a) No person shall cause, suffer, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne, and in no case shall established ambient air quality standards be exceeded at the property line.

(b) The owner or operator of the plant shall maintain dust control of the plant premises and access roads by paving, oil treatment, or other suitable measures.

(c) All stone crushing operations shall employ a water spray over the crusher.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976

(51.21) .0511 PARTICULATES, SO (2) FROM LIGHTWEIGHT AGGREGATE PROCESSES

(a) No person shall cause, suffer, allow, or permit any material to be produced, handled, transported or stockpiled without taking measures to reduce to a minimum any particulate matter from becoming airborne.

(b) The owner or operator of the plant shall maintain dust control of the plant premises and access roads by paving, oil treatment, or other suitable measures.

(c) All stone crushing operations shall employ a water spray over the crusher.

(d) All stacks serving kilns or dryers shall be equipped with air pollution control devices capable of collecting a minimum of 95 percent by weight of particulate matter and controlling the emission of sulfur dioxide to not more than 2.3 pounds per million BTU input.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976;
Amended Eff. April 1, 1977.

(51.3) .0512 PARTICULATES FROM WOOD PRODUCTS FINISHING PLANTS

No person shall cause, suffer, allow, or permit particulate matter caused by the working, sanding, or finishing of wood to be discharged from any stack, vent, or building into the atmosphere without providing, as a minimum for its collection, adequate duct work and properly designed collectors, or such other devices as approved by the commission, and in no case shall established ambient air quality standards be exceeded at the property line.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976

(51.3) .0513 CONTROL OF PARTICULATES FROM PORTLAND CEMENT PLANTS

All cement kilns shall be equipped with gas cleaning devices to reduce the

particulate matter in the gas discharged to the atmosphere to not less than 99.7 percent of the particulate matter entering the gas cleaning device. However, particulate matter discharged to the atmosphere shall not exceed 0.327 pounds/barrel.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976

(51.4) .0514 CONTROL OF PARTICULATES FROM FERROUS JOBBING FOUNDRIES

(a) No person shall cause, suffer, permit, or allow the emission of particulate matter which will exceed the limits specified in the following table from any ferrous jobbing foundry cupola in operation on or prior to January 1, 1972. Any foundry existing on or before January 1, 1972, having a capacity greater than shown in the table in Subdivision (b) of this Regulation, and any new foundry, regardless of size, shall control particulate emissions in accordance with the limits specified in Regulation .0515 of this Section, "Particulates from Miscellaneous Industrial Processes."

(b) The following table is for particulate emissions from ferrous jobbing foundries existing on or before January 1, 1972:

Process Weight (Lbs./Hr.)	Maximum Allowable Emission Rate (Lbs./Hr.)
1,000	3.05
2,000	4.70
3,000	6.35
4,000	8.00
5,000	9.58
6,000	11.30
7,000	12.90
8,000	14.30
9,000	15.50
10,000	16.65
12,000	18.70
16,000	21.60
18,000	23.40
20,000	25.10

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.21).0515 PARTICULATES FROM MISCELLANEOUS INDUSTRIAL PROCESSES

(a) No person shall cause, suffer, allow, or permit particulate matter caused by industrial processes for which no other emission control standards are applicable to be discharged from any stack, vent, or outlet into the atmosphere in excess of the hourly rate shown in the table in Subdivision (c) of this Regulation.

(b) Process weight per hour means the total weight of all materials introduced into any specific process that may cause any emission of particulate matter. Solid fuels charged are considered as part of the process weight, but liquid and gaseous fuels and combustion air are not. For a cyclical or batch operation, the process weight per hour is derived by dividing the total process weight by the number of hours in one complete operation from the beginning of any given process to the completion thereof, excluding any time during which the equipment is idle. For a continuous operation, the process weight per hour is derived by dividing the process weight for a typical period of time by the number of hours in that typical period of time.

(c) The allowable emission rate for particulate matter based on actual process weight rate is listed in the following table:

Process Weight Rate		Allowable Emission Rate for Particulate Matter	Process Weight Rate		Allowable Emission Rate for Particulate Matter
Lb/Hr	Ton/Hr	Lb/Hr	Lb/Hr	Tons/Hr	Lb/Hr
100	0.05	0.551	16,000	8	16.5
200	0.10	0.877	18,000	9	17.9
400	0.20	1.39	20,000	10	19.2
600	0.30	1.83	30,000	15	25.2
800	0.40	2.22	40,000	20	30.5
1,000	0.50	2.58	50,000	25	35.4
1,500	0.75	3.38	60,000	30	40.0
2,000	1.00	4.10	70,000	35	41.3
2,500	1.25	4.76	80,000	40	42.5
3,000	1.50	5.38	90,000	45	43.6
3,500	1.75	5.97	100,000	50	44.6
4,000	2.00	6.52	120,000	60	46.3
5,000	2.50	7.58	140,000	70	47.8
6,000	3.00	8.56	160,000	80	49.1
7,000	3.50	9.49	200,000	100	51.3
8,000	4.00	10.4	1,000,000	500	69.0
9,000	4.50	11.2	2,000,000	1,000	77.6
10,000	5.00	12.1	6,000,000	3,000	92.7
12,000	6.00	13.6			

(d) Calculation of the rate of emission for process weight rates up to 60,000 lb/hr shall be accomplished by use of the equation F = 4.10 times P to the power of 0.67 and for process weight rates in excess of 60,000 lb/hr shall be accomplished by use of the equation F = 55.0 times P to the power of 0.11 minus 40 where E = allowable emission rate for particulate matter in lb/hr and P = process weight rate in tons/hr.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(51.6) .0516 SULFUR DIOXIDE EMISSIONS FROM FUEL BURNING INSTALLATIONS

No person shall cause, suffer, allow or permit sulfur dioxide caused by the combustion of a fuel or fuels to be discharged from any stack or chimney in excess of 2.3 pounds of sulfur dioxide per million BTU input, provided that sources subject to an emission standard for this pollutant in Regulation .0524 or .0525 of this Section shall meet that standard.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976;
Amended Eff. April 1, 1977.

(51.18) .0517 EMISSIONS FROM PLANTS PRODUCING SULFURIC ACID

No person shall cause, suffer, allow, or permit the discharge of air contaminants resulting from the manufacture of sulfuric acid into the atmosphere except in compliance with the following:

(1) The emission of sulfur dioxide into the atmosphere must be limited to not more than 27 pounds for each ton of sulfuric acid produced;

(2) The emission of acid mist must be limited to not more than five-tenths of a pound per ton of sulfuric acid produced.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(50.4) .0518 CONTROL OF HYDROCARBON EMISSIONS FROM STATIONARY SOURCES

(a) No person shall place, store or hold in any stationary tank, reservoir, or other container of more than 50,000 gallons capacity any liquid compound containing carbon and hydrogen or

containing carbon and hydrogen in combination with any other element which has a vapor pressure of one and five-tenths pounds per square inch absolute or greater under actual storage conditions unless such tank, reservoir, or other container is a pressure tank capable of maintaining working pressures sufficient at all times to prevent vapor or gas loss into the atmosphere, or is designed and equipped with one of the following vapor loss control devices:

(1) a floating pontoon, or double deck type cover equipped with closure seals to enclose any space between the cover's edge and compartment wall; this control equipment shall not be permitted if the compound is a photochemically reactive material having a vapor pressure of 11.0 pounds per square inch absolute or greater under actual storage conditions; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place;

(2) a vapor recovery system which reduces the emission of organic materials into the atmosphere by at least 90 percent by weight; all tank gauging or sampling devices shall be gas-tight except when tank gauging or sampling is taking place;

(3) other equipment or means of equal efficiency for purposes of air pollution control as may be approved by the commission.

(b) No person shall load in any one day more than 20,000 gallons of any volatile organic compound into any tank-truck, trailer, or railroad tank car from any loading facility unless such loading incorporates the use of submerged loading through boom loaders that extend down into the compartment being loaded or by other methods acceptable to the commission.

(c) No person shall discharge at any one site more than 40 pounds of organic material into the atmosphere in any one day, from any article, machine, equipment or other contrivance used for employing, applying, evaporating or drying any photochemically reactive material or substance containing such solvent unless said discharge has been reduced by 85 percent. Such photochemically reactive solvents include any solvent with an aggregate of more than 20 percent of its total volume composed of the chemical compounds classified below, or which exceed any of the following percentage composition limitations, referred to the total volume of the solvent:

(1) a combination of hydrocarbons, alcohols, aldehydes, esters, ethers, or ketones having an olefinic or cyclo-olefinic type of unsaturation -- five percent;

(2) a combination of aromatic hydrocarbons with eight or more carbon atoms to the molecule except ethylbezene -- eight percent;

(3) a combination of ethylbenezene, ketones having branched hydrocarbon structure, trichloroethylene, or toluene -- 20 percent.

(d) Whenever any organic solvent, or any constituent of any organic solvent may be classified from its chemical structure into more than one of the above groups of organic compounds, it shall be considered as a member of the most reactive chemical group, that is, that group having the least allowable percent of the total volume of solvents.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.7) .0519 CONTROL OF NITROGEN DIOXIDE EMISSIONS

(a) No person shall cause or permit emissions of nitrogen dioxide from an oil or gas-fired boiler with a capacity of 250 million BTU per hour or more in excess of six-tenths of a pound per million BTU of heat input per hour.

(b) No person shall cause or permit emissions of nitrogen dioxide from a coal-fired boiler with a capacity of 250 million BTU or more in excess of one and three-tenths pounds per million BTU of heat input per hour.

(c) No person shall cause or permit the emission of nitrogen dioxide from nitric acid manufacturing plants in excess of five and eight-tenths pounds per ton of acid produced.

(d) No person shall cause or permit the emission of nitrogen dioxide from sulfuric acid manufacturing plants utilizing the chamber process in excess of five and eight-tenths pounds per ton of acid produced.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976.

(51.13) .0520 CONTROL AND PROHIBITION OF OPEN BURNING

(a) Purpose. This Regulation is for the purpose of preventing, abating, and controlling air pollution resulting from air contaminants released in the open burning of refuse or other combustible materials.

(b) Scope. This Regulation shall apply to all operations involving open burning except those specifically exempted by Subdivision (d) of this Regulation.

(c) No person shall cause, suffer, allow or permit open burning of refuse or other combustible material except those covered by a permit issued under the authority of the commission under Section 143-215.108 of the act or the regulations of a duly certified local air pollution control program having jurisdiction.

(d) Permissible Open Burning. While recognizing that open burning contributes to air pollution, the commission is aware that certain types of open burning may reasonably be allowed in the public interest; therefore, the following types of open burning are permissible as specified if burning is not prohibited by ordinances and regulations of governmental entities having jurisdiction. The authority to conduct open burning under the provisions of this Regulation does not exempt or excuse any person from the consequences, damages or injuries which may result from such conduct, nor does it excuse or exempt any person from complying with all applicable laws, ordinances, regulations and orders of the governmental entities having jurisdiction even though the open burning is conducted in compliance with this Regulation. Permission granted under the authority of the commission under this Regulation shall be subject to continuing review and may be withdrawn at any time:

(1) fires purposely set for the instruction and training of fire-fighting personnel when conducted under the supervision of the North Carolina Insurance Department, North Carolina technical institutes, or the North Carolina community colleges, including the North Carolina Fire College and the North Carolina Rescue College, which are conducted with the cooperation of one or both of these agencies;

(2) fires purposely set for the instruction and training of fire-fighting personnel at permanent fire-fighting training facilities when conducted by a fire department, provided that such fires will not be permitted if the primary purpose in setting the fire is refuse disposal or recovery of salvageable materials. Factors which may be considered in determination of primary purpose include type, amount, and nature of combustible substances;

(3) fires purposely set for the instruction and training of industrial fire-fighting personnel in training programs which are repetitious and continuous in nature if a plan containing program aspects related to possible air pollution including, but not limited to nature and location of the exercise, nature of materials to be burned, amount of each type of material to be burned, training objectives of the exercise, and, insofar as it is known, a schedule of dates and times of the exercises, has been submitted to and has been approved by the Director

of the Division of Environmental Management, provided that such fires will not be permitted if the primary purpose in setting the fire is refuse disposal or recovery of salvageable materials; Factors which may be considered in determination of primary purpose include type, amount and nature of combustible substances. Any deviations from the dates and times of exercises, including additions, postponements, and deletions, submitted in the schedule in the approved plan will be communicated verbally to the appropriate departmental field office at least one hour before the change;

(4) fires purposely set for the instruction and training of public and industrial fire-fighting personnel not covered under Subdivisions (d) (1), (d) (2), or (d) (3) of this Regulation, if the training program aspects related to possible air pollution effects are approved in advance by the air quality section and provided these fire-fighting exercise conditions are met:

(A) The appropriate departmental field office must be initially notified verbally or in writing at least 48 hours in advance of any burning conducted in conjunction with a fire training exercise. If initial notice is given verbally, a written notification must also be submitted within 24 hours of the initial verbal notification. The notification, either written or verbal, must include nature and location of the exercise, date and time exercise is to be held, nature of materials to be burned, amount of each type of material to be burned, and training objectives of the exercise;

(B) The burning of salvageable items, including but not limited to insulated wire and electric motors, will not be exempted as a fire-training exercise, except as provided in Subdivision (C) (iii) of this Paragraph;

(C) The air quality regional engineer for the appropriate departmental field office may withhold approval for burnings purposely set for fire-fighting exercises, other than those described in Subdivisions (d) (1), (d) (2), and (d) (3) of this Regulation, in the following cases:

(i) when the required notice has not been received 48 hours in advance of the proposed burning;

(ii) when the required notice does not include adequate details with respect to the nature and location of the exercise, date and time the exercise is to be held, nature of objects or materials to be burned, amount of each type of material to be burned, and

training objectives of the exercise;

(iii) when salvageable items are proposed to be burned in conjunction with the exercise, except that the regional engineer may allow an exercise involving the burning of a motor vehicle if the sole objective is instruction on the techniques of fighting such a fire; The number of motor vehicles burned over a period of time by any one training unit or by several related training units shall be considered in determining the objective of the exercises;

(iv) when the training unit has entered a formal or informal contractual relationship prior to any burning incorporated into a training exercise wherein the unit is compensated for conducting the burning;

(5) fires purposely set by manufacturers of fire extinguishing materials or equipment, testing laboratories, or other persons approved by the Environmental Management Commission, for the purpose of testing or developing such materials or equipment in accordance with a valid standard qualification program;

(6) fires purposely set to agricultural lands for disease and pest control and other accepted agricultural or wildlife management practices acceptable to the North Carolina Environmental Management Commission;

(7) fires purposely set to forest lands for forest management practices acceptable to the division of forestry and the North Carolina Environmental Management Commission;

(8) fires purposely set in rural areas for rights-of-way maintenance only in instances where there are no other practicable or feasible methods of disposal and under conditions acceptable to the North Carolina Environmental Management Commission;

(9) camp fires and fires used solely for outdoor cooking and other recreational purposes, or for ceremonial occasions, or for human warmth and comfort;

(10) open burning of leaves, tree branches or yard trimmings originating on the premises of private residences and burned on those premises in areas where no public pickup facilities are available, and such burning is done between 8:00 a.m. and 6:00 p.m. and does not create a nuisance;

(11) open burning for land clearing or right-of-way maintenance in areas other than those zoned solely residential or used primarily for residential purposes, provided the following conditions are met:

(A) Prevailing winds at the time of burning must be away from any city or town or built-up area, the ambient air of which may be significantly affected by smoke, fly-ash, or other air contaminants from the burning;

(B) The location of the burning must be at least 1,000 feet from any dwelling located in a predominantly residential area other than a dwelling structure located on the property on which the burning is conducted;

(C) The amount of dirt or the material being burned must be minimized;

(D) Heavy oils, asphaltic materials, items containing natural or synthetic rubber, or any materials other than plant growth may not be burned;

(E) Initial burning may generally be commenced only between the hours of 9:00 a.m. and 3:00 p.m., and no combustible material may be added to the fire between 3:00 p.m. on one day and 9:00 a.m. on the following day, except that, under favorable meteorological conditions, deviation from the above stated hours of burning may be granted by the air pollution control agency having jurisdiction. It shall be the responsibility of the owner or operator of the open burning operation to obtain written approval for burning during periods other than those specified above;

(12) fires for the disposal of dangerous materials where there is no alternative method of disposal, and burning is conducted in accordance with procedures acceptable to the Environmental Management Commission.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1970;
Amended Eff. December 1, 1976.

(50.1.2) .0521 CONTROL OF VISIBLE EMISSIONS

(a) Purpose. The intent of this Regulation is to promulgate rules pertaining to the prevention, abatement, and control of emissions generated as a result of fuel burning operations and other industrial processes where an emission can be reasonably expected to occur,

except during startups made in accordance with procedures approved by the commission.

(b) Scope. This Regulation shall apply to all fuel burning installations and such other processes as may cause a visible emission incident to the conduct of their operations, provided that sources subject to an emission standard for this pollutant in Regulation .0524 or .0525 of this Section shall meet that standard.

(c) Installations Existing as of July 1, 1971. No person shall cause, suffer, allow, or permit emissions from any installation which are:

(1) of a shade or density darker than that designated as No. 2 on the Ringelmann Chart for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period, or

(2) of greater than 40 percent opacity for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period.

(d) Installations Established After July 1,1971. No person shall cause, suffer, allow, or permit emissions from any installation which are:

(1) of a shade or density darker than that designated as No. 1 on the Ringelmann Chart for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period, or

(2) of greater than 20 percent opacity for an aggregate of more than five minutes in any one hour or more than 20 minutes in any 24-hour period.

(e) Where the presence of uncombined water is the only reason for failure of an emission to meet the limitations of Subdivision (c) or (d) of this Regulation, those requirements shall not apply.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976;
Amended Eff. April 1, 1977; June 30, 1976.

(50.6) .0522 CONTROL AND PROHIBITION OF ODOROUS EMISSIONS

(a) Purpose. The purpose of this Regulation is to provide for the control and prohibition of odorous emissions.

(b) Scope. This Regulation shall apply to all operations that produce odorous emissions.

(c) No person shall cause, suffer, allow, or permit any plant engaged in the processing of animal, mineral, or vegetable matter to be operated without employing suitable measures for the control of odorous emissions including wet scrubbers, incinerators, or such other devices as may be approved by the commission.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.107 (a) (5);
Eff. February 1, 1976

(51.9) .0523 CONTROL OF CONICAL INCINERATORS

(a) Purpose. The purpose of this Regulation is to set forth the requirements of the commission relating to the use of conical incinerators in the burning of wood and agricultural waste.

(b) Scope. This Regulation shall apply to all conical incinerators which are designed to incinerate wood and agricultural waste.

(c) No person shall cause, suffer, allow, or permit the burning of wood or agricultural waste in a conical incinerator without taking reasonable precaution to prevent air pollutants from becoming airborne. Such reasonable precautions shall include, but not be limited to, the following. Each conical incinerator subject to this part shall be equipped and maintained with:

(1) an underfire and an overfire forced air system and variable damper which shall be automatically controlled to ensure the optimum temperature range for the complete combustion of the amount and type of material waste being charged into the incinerator;

(2) a temperature recorder for continuously recording the temperature of the exit gas;

(3) a feed system capable of delivering the waste to be burned at a sufficiently uniform rate to prevent temperature from dropping below 800 degrees Fahrenheit during normal operation, with the exception of one startup and one shutdown per day.

(d) The Owner of the conical incinerator shall monitor and report ambient particulate concentrations in accordance with a method and schedule acceptable to the commission.

(e) In no case shall the ambient air quality standards as defined in Section .0400 of this Subchapter be exceeded.

(f) The conical incinerator shall be operated in such a manner as to prevent visible emissions from exceeding that shade or density allowed by Regulation .0521 of this Section.

(g) The distance a conical incinerator is located and/or operated from the nearest structure(s) in which people reside or work shall be optimized to prevent air quality impact and shall be subject to approval by the commission.

(h) New conical incinerators shall be in compliance with this Regulation on startup. Existing conical incinerators shall meet with the following schedule:

(1) Reports and plans shall be submitted on or before July 1, 1974;

(2) Purchase contracts shall be let on or before October 1, 1974;

(3) Construction shall be begun on or before December 31, 1974;

(4) Facilities shall be completed and placed in operation on or before June 1, 1975.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215/107 (a) (5);
Eff. February 1, 1976.

(10.0) .0524 NEW SOURCE PERFORMANCE STANDARDS

(a) Sources of the following types when subject to new source performance standards promulgated in 40 CFR 60 (CFR refers to "Code of Federal Regulations") shall comply with the emission standards, monitoring and reporting requirements, maintenance requirements, notification and record keeping requirements, performance test requirements, test method and procedure provisions, and any other provisions, as required therein, rather than with any otherwise-applicable regulation in this Section which would be in conflict therewith:

(1) fossil fuel-fired steam generators (40 CFR 60.1 to 60.49);

(2) incinerators (40 CFR 60.1 to 60.39 and 60.50 to 60.59);

(3) portland cement plants (40 CFR 60.1 to 60.39 and 60.60 to 60.69);

(4) nitric acid plants (40 CFR 60.1 to 60.39 and 60.70 to 60.79);

(5) sulfuric acid plants (40 CFR 60.1 to 60.39 and 60.80 to 60.89);

(6) asphalt concrete plants (40 CFR 60.1 to 60.39 and 60.90 to 60.99);

(7) petroleum refineries (40 CFR 60.1 to 60.39 and 60.100 to 60.109);

(8) storage vessels for petroleum liquids (40 CFR 60.1 to 60.39 and 60.110 to 60.119);

(9) secondary lead smelters (40 CFR 60.1 to 60.39 and 60.120 to 60.129);

(10) secondary brass and bronze ingot production plants (40 CFR 60.1 to 60.39 and 60.130 to 60.139);

(11) iron and steel plants (40 CFR 60.1 to 60.39 and 60.140 to 60.149);

(12) sewage treatment plants (40 CFR 60.1 to 60.39 and 60.150 to 60.159);

(13) phosphate fertilizer industry: wet process phosphoric acid plants (40 CFR 60.1 to 60.39 and 60.200 to 60.209);

(14) phosphate fertilizer industry: superphosphoric acid plants (40 CFR 60.1 to 60.39 and 60.210 to 60.219);

(15) phosphate fertilizer industry: diammonium phosphate plants (40 CFR 60.1 to 60.39 and 60.220 to 60.229);

(16) phosphate fertilizer industry: triple superphosphate plants (40 CFR 60.1 to 60.39 and 60.230 to 60.239);

(17) phosphate fertilizer industry: granular triple superphosphate storage facilities (40 CFR 60.1 to 60.39 and 60.240 to 60.249);

(18) steel industry: electric arc furnaces (40 CFR 60.1 to 60.39 and 60.270 to 60.279);

(19) coal preparation plants (40 CFR 60.1 to 60.39 and 60.250 to 60.259);

(20) primary copper smelters (40 CFR 60.1 to 60.39 and 60.160 to 60.169);

(21) primary zinc smelters (40 CFR 60.1 to 60.39 and 60.170 to 60.179);

(22) primary lead smelters (40 CFR 60.1 to 60.39 and 60.180 to 60.189);

(23) primary aluminum reduction plants (40 CFR 60.1 to 60.39 and 60.190 to 60.199).

(b) All requests, reports, applications, submittals, and other communications to the administrator required under Subdivision (a) of this Regulation shall be submitted to the Environmental Management Commission rather than to the Environmental Protection Agency.

(c) In the application of this Regulation, definitions contained in 40 CFR 60 shall apply rather than those of Section .0100 of this Subchapter when conflict exists.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.60; 143-215.107 (a) (5); Eff. June 18, 1976.

(11.0) .0525 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

(a) Sources emitting pollutants of the following types when subject to national emission standards for hazardous air pollutants promulgated in 40 CFR 61 (CFR refers to "Code of Federal Regulations") shall comply with emission standards, monitoring and reporting requirements, notification and record keeping requirements, performance test requirements, test method and procedure provisions, and any other provisions, as required therein, rather than with any otherwise applicable regulation in this Section which would be in conflict therewith:

(1) asbestos (40 CFR 61.01 to 61.29),

(2) beryllium (40 CFR 61.01 to 61.19 and 61.30 to 61.39),

(3) beryllium from rocket motor firing (40 CFR 61.01 to 61.19 and 61.40 to 61.49),

(4) mercury (40 CFR 61.01 to 61.19 and 61.50 to 61.59).

(b) All requests, reports, applications, submittals, and other communications to the administrator required under Subdivision (a) of this Regulation shall be submitted to the Environmental Management Commission rather than to the Environmental Protection Agency.

(c) In the application of this Regulation, definitions contained in 40 CFR 61 shall apply rather than those of Section .0100 of this Subchapter when conflict exists.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.107 (a) (5); Eff. June 18, 1976.

(9.0)
(13.0) SECTION .0600 - AIR CONTAMINANTS; MONITORING, REPORTING

(2.0) .0601 PURPOSE AND SCOPE

(a) The purpose of this Section is to set forth the requirements of the commission relating to monitoring air contaminant emissions and filing reports covering their discharge into the outdoor atmosphere of the state.

(b) This Section shall apply to all persons subject to the provisions of Section .0600 of Subchapter 2H of this Title.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. June 18, 1976.

(1.0) .0602 DEFINITIONS

The following definitions of terms apply throughout this Section with the exception of Regulation .0603 in which the definitions contained in 40 CFR 60 shall apply:

(1) "CFR" means the "Code of Federal Regulations."

(2) "Fossil fuel-fired steam generator" means a furnace or boiler used in the process of burning fossil fuel for the primary purpose of producing steam by heat transfer.

(3) "Capacity factor" means the ratio of the average load on a machine or equipment for the period of time considered to the capacity rating of the machine or equipment.

(4) "Excess emissions" means emissions of an air pollutant in excess of an emission standard.

(5) "Emission standard" means a regulation (or portion thereof) setting forth an allowable rate of emissions, level of opacity, or prescribing equipment or fuel specifications that result in control of air pollution emissions.

(6) "Sulfuric acid plant" means any facility producing sulfuric acid by the contact process by burning elemental sulfur, alkylation acid, hydrogen sulfide, or acid sludge, but does not include facilities where conversion to sulfuric acid is utilized primarily as a means of preventing emissions to the atmosphere of sulfur dioxide or other sulfur compounds.

(7) "Nitric acid plant" means any facility producing nitric acid 30 to 70 percent in strength by either the pressure or atmospheric pressure process.

(8) "Distillate oils" are those liquid fractions of petroleum which are normally derived by vaporization and condensation of petroleum remaining after gasoline and fractions more volatile than gasoline have been removed.

(9) "Residual oils" are those liquid or semi-liquid fractions of petroleum remaining after distillate oils and fractions more volatile than distillate oils have been removed.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. June 18, 1976.

(10.0) .0603 SOURCES COVERED BY NEW SOURCE PERFORMANCE STANDARDS

Sources of the following types when subject to new source performance standards promulgated in 40 CFR 60 shall be monitored as required therein, and the excess emissions shall be reported as specified therein quarterly to the commission:

(1) fossil fuel-fired steam generators (40 CFR 60.1 to 60.49),

(2) nitric acid plants (40 CFR 60.1 to 60.39 and 60.70 to 60.79),

(3) sulfuric acid plants (40 CFR 60.1 to 60.39 and 60.80 to 60.89),

(4) petroleum refineries (40 CFR 60.1 to 60.39 and 60.100 to 60.109),

(5) primary copper smelters (40 CFR 60.1 to 60.39 and 60.160 to 60.169),

(6) primary zinc smelters (40 CFR 60.1 to 60.39 and 60.170 to 60.179),

(7) primary lead smelters (40 CFR 60.1 to 60.39 and 60.180 to 60.189).

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. June 18, 1976.

(2.0) .0604 SOURCES COVERED BY IMPLEMENTATION PLAN REQUIREMENTS

(a) Sources of the following types when included in Subdivision 1.1 of Appendix P of 40 CFR 51 concerning the preparation, adoption, and submittal of implementation plans but not including those sources covered by Regulation .0603 of this Section shall be monitored as described in Subdivision 2 and Subdivision 3, Paragraphs 3.1.1 to 3.1.5, where the performance specifications are those found in Appendix B of 40 CFR 60, and Paragraphs 3.2 to 3.8, of Appendix P of 40 CFR 51; and the excess emissions shall be reported quarterly to the commission in the manner described in Subdivision 4 and Subdivision 5, Paragraphs 5.1 to 5.3.3, of Appendix P of 40 CFR 51 except as otherwise provided in this Section:

(1) fossil fuel-fired steam generators,

(2) nitric acid plants,

(3) sulfuric acid plants,

(4) petroleum refineries.

The minimum requirements described in the referenced portions of Appendix P of 40 CFR 51 are hereby adopted as the requirements to be used under this Regulation. Wherever the language of the referenced portion of Appendix P of 40 CFR 51 speaks of the "state" or "state plan," the requirements described therein shall apply to those sources to which they pertain.

(b) A source which has purchased an emission monitoring system prior to September 11, 1974, is exempt from having to meet the test procedures described in 40 CFR 60 Appendix B for a period of five years following the approval by the Environmental Protection Agency of this Regulation as a part of the North Carolina State Implementation Plan, provided that such system was approved under the then regulation number 8 which was recodified as Section .0600 of Subchapter 2D of Title 15 of the North Carolina Administrative Code, effective February 1, 1976. A monitoring scheme which uses significant manual operations, for example, a periodic grab sampling and analysis scheme, is not considered to be an emission monitoring system as described in this Subdivision.

(c) When effluents from two or more affected facilities of similar design and operating characteristics are combined before being released to the atmosphere, the monitoring system may be installed on the combined effluent.

(d) A six-minute time period shall be deemed appropriate as an alternative opacity averaging time period as described in Subdivision 4.2 of Appendix P of 40 CFR 51.

(e) Data reporting or reduction procedures varying from those prescribed by this Regulation may be used if the owner or operator of a source shows to the satisfaction of the Director, Division of Environmental Management, that the alternate procedures are at least as accurate as those in the Regulation.

(f) Alternative monitoring and reporting requirements may be approved, on a case-by-case basis, by the Director, Division of Environmental Management, through the following procedure:

(1) The owner or operator of a source may apply in writing to the director for approval of alternative monitoring and reporting requirements. The application shall include:

(A) the basis or reason that alternative monitoring and reporting requirements are more desirable than those prescribed by this Regulation,

(B) a proposal of alternative monitoring and reporting requirements,

(C) any other information that the source owner or operator feels would be helpful to the director in his evaluation of the application.

(2) Examples of situations where alternative monitoring and reporting requirements may be approved include, but are not limited to, the following:

(A) when installation of a continuous monitoring system or device prescribed by this Regulation would not provide accurate determinations of emissions;

(B) when the affected facility is operated on less than 30 days per year;

(C) when effluents from two or more facilities of significantly different design and operating characteristics are combined before release to the atmosphere or when the effluent is released to the atomosphere through more than one point;

(D) when the director determines that the requirements prescribed by this Regulation would impose an extreme economic burden on the source owner or operator; The determination of an extreme economic burden shall be

made on the basis of whether meeting the requirements prescribed by this Regulation would produce serious hardship without equal or greater benefit to the public;

(E) when the monitoring systems prescribed by this Regulation cannot be installed due to physical limitations at the facility; The determination of such limitations shall be made on the basis of whether meeting the requirements prescribed by this Regulation would necessitate significant reconstruction of the facility.

(3) The director may require the submission of additional information as he deems appropriate to evaluate the application.

(4) Upon making a determination that the source should be subject to alternative monitoring and reporting requirements, the director may approve either the proposed alternative monitoring and reporting requirements or any other monitoring and reporting requirements that he deems appropriate and feasible.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. June 18, 1976.

(50.1.2).0605 WOOD AND WOOD FOSSIL FUEL COMBINATION UNITS

(a) There shall be installed, calibrated, maintained, and operated a photoelectric or other type visible emissions detector and recorder on any stack discharging the flue gases from one or more steam generator units when the heat input from wood fuels (or when the sum of the heat inputs from wood fuels and liquid or solid fossil fuels for generators not covered by Regulation .0603 or .0604 of this Section) to any individual steam generator unit discharging to said stack exceeds 250 million BTU per hour and the annual average capacity factor is greater than 30 percent as demonstrated to the state by the owner or operator.

(b) The visible emissions detector instrumentation shall be subject to the manufacturer's recommended zero adjustment and calibration procedures.

(c) The record of such measurements shall be summarized showing the date and duration of any violations of the requirements of applicable visible emission regulations and submitted to the Environmental Management Commission at quarterly intervals. The recorder charts from which the summary is prepared shall be retained for at least one year and made available for inspection by personnel of the division of environmental management.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. June 18, 1976.

(51.2) .0606 OTHER COAL OR RESIDUAL OIL BURNERS

(a) Provisions shall be made for determining sulfur dioxide emissions into the ambient air by all sources which burn coal or residual oil and which are not required to monitor for sulfur dioxide emissions by Regulation .0603 or .0604 of this Section when the sum of the heat inputs from coal and residual oil to any individual unit exceeds 250 million BTU per hour and the unit has an annual average capacity factor of greater than 30 percent, as reported to the Federal Power Commission for calendar year 1974, or as otherwise demonstrated to the state by the owner or operator.

(b) Such determinations may be made by an instrument for continuously monitoring and recording sulfur dioxide emissions or in the case of fuel burning installations by analyses of representative samples of fuels to determine BTU value and percent sulfur content or by such content or by such other procedures as may be approved by the Director, Division of Environmental Management, or his delegate.

(c) The continuous monitoring of sulfur dioxide emissions and the determination of the sulfur content of fuels shall be conducted in accordance with procedures approved by the Director, Division of Environmental Management, or his delegate.

(d) The data to be reported quarterly to the commission shall include:

(1) in the case of fuel analysis, the quantity and type of fuels burned, the BTU value, the sulfur content in percent by weight, and the total calculated sulfur dioxide emissions in those cases where these emissions are excess emissions;

(2) in the case of continuous monitoring of emissions, the emission rate expressed in the same units as the applicable standard, the maximum instantaneous rate, and the total sulfur dioxide emissions in those cases where these emissions are excess emissions. Recorder charts from continuous monitoring instruments shall be retained for at least one year and made available for inspection by personnel of the divison of environmental management.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. December 1, 1976; June 18, 1976.

(9.0)
(13.0) .0607 EXCEPTIONS TO MONITORING AND REPORTING REQUIREMENTS

(a) The following exceptions apply to Regulations .0604 to .0606 of this Section:

(1) A source not subject to an emission standard of Section .0500 of this Subchapter shall not be required to be monitored or reported under this Section.

(2) A source scheduled for retirement by October 6, 1980, shall not be required to be monitored or reported under this Section, provided that adequate evidence and guarantees are provided that clearly show that the source will cease operations prior to such date.

(3) Monitoring and reporting during a period of monitoring system malfunction shall not be required under this Section, provided that the source owner or operator shows, to the satisfaction of the Director, Division of Environmental Management, that the malfunction was unavoidable and is being repaired as expeditiously as practicable.

(4) Proof of continuous monitoring system performance shall be provided on request of the Director, Divison of Environmental Management, when system repairs or adjustments have been made.

(b) Sources otherwise required to be monitored and reported under Regulation .0605 or .0606 of this Section shall not be required to be monitored or reported under this Section if the source is operated on less than 30 days per year.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. February 1, 1976;
Amended Eff. June 18, 1976.

(2.0) .0608 PROGRAM SCHEDULE

(a) All persons required to report emissions by Regulations .0603, .0604, .0605 or .0606 of this Section shall have in operation a monitoring program for each affected source on and after the day 18 months following approval by the Environmental Protection Agency of this Regulation as a part of the North Carolina State Implementation Program except that reasonable extensions of this period may be granted as described in 40 CFR 51.19 (e) (5) and Subdivision 1.3 of Appendix P of 40 CFR 51.

(b) All persons required to report emissions by Regulation .0605 or .0606 of this Section shall, by October 16, 1976, (November 1, 1973, for affected facilities which were required to be monitored under the then regulation number 8 which was recodified as Section .0600 of Subchapter 2D of Title 15 of the North Carolina Administrative Code, effective February 1, 1976) submit to the division of environmental management for review and approval a program for complying with such requirements. Such a program shall include a statement concerning the qualifications of the personnel who will be doing the sampling and sample analysis, the date by which the first report will be submitted, and a description of the procedures and equipment for sampling and sample analysis.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. June 18, 1976.

(3.0)
(9.0) .0609 MONITORING CONDITION IN PERMIT

Reference to the obligations of the approved monitoring program shall be included as a condition of the permit issued for the source. In the case of permits outstanding, this reference shall be included upon renewal of the permit.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.68;
Eff. June 18, 1976.

(2.0) .0610 DELEGATION

The director is authorized to exercise all functions necessary to administer this Regulation and to delegate any or all such functions, except that he shall not delegate below the level of regional engineers, division of environmental management.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.3 (a) (4);
Eff. June 18, 1976

(2.0) SECTION .0700 - POST ATTAINMENT POLICY

(2.0) .0701 APPLICABILITY

North Carolina's federally approved air quality implementation plan prescribes that sources be in compliance with national secondary standards by May 31, 1975. This policy states enforcement procedures to be taken against point sources and area sources which will not be in compliance with applicable emission standards and compliance schedules

by June 1, 1975. No formal enforcement action will be taken against those sources which will be in compliance by August 31, 1975.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.110;
Eff. February 1, 1976.

(1.0) .0702 DEFINITIONS

The following definitions of terms apply throughout this Section:

(1) "Point sources" mean those sources capable of emitting more than 100 tons per year of any pollutant should there be no control employed.

(2) "Good faith effort" means that positive action taken by a company that is specifically intended to lead to achievement of compliance with applicable air quality standards. Verbal intent alone to do something cannot be considered a good faith effort. Positive actions include awarding of contracts, submittal of permit application, ordering equipment, installation of equipment, and documented futile attempts to obtain "clean fuel" where control has not, in the past, been practical.

(3) "Area sources" mean all sources other than point sources.

(4) "Significant public interest" means comments from the public containing evidence which show that the public health may be endangered by the proposed extension or that compliance can be achieved in a shorter period of time than that proposed.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.110;
Eff. February 1, 1976.

(2.0) .0703 SOURCE CATEGORIES

Point sources and area sources will each be divided into four categories as follows:

(1) Category A includes sources which have shown good faith, but due to the following types of reasons will be unable to meet their present compliance schedules:

(A) delays in construction time, due to the inability to obtain certain construction materials (example -- steel);

(B) inability to obtain firm contracts for low sulfur fuels;

(C) delays in equipment delivery;

(D) operational problems associated with new control equipment;

(E) sources that have established compliance through utilizing by-product markets, but are required to change control strategies, due to loss of by-product market;

(F) equipment installation delays beyond the control of the source.

(2) Category B includes sources which have shown good faith, but due to the following types of reasons will be unable to meet their compliance schedules:

(A) sources that have not established controls, due to technological indecision;

(B) sources that have been identified and located by the division of environmental management in the latter part of the compliance period, thus making it impossible to meet the schedule for compliance;

(C) contracts for control equipment were not made in time to allow completion of schedule.

(3) Category C includes sources which have made little or no effort to comply with air quality emission standards, compliance schedules, permit conditions, or failed to obtain or renew a permit. Placing a source within this category will be based primarily on the recommendations of the field engineers.

(4) Category D includes sources, including those in any of the above categories, which if granted a compliance extension could possibly either singularly or in combination with other sources result in contravention of any national primary ambient air quality standard.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.110;
Eff. February 1, 1976.

(15.0) .0704 ENFORCEMENT PROCEDURES

(a) General. Enforcement procedures will consist of a least one of the following:

(1) special order by consent,

(2) special order,

(3) special order and assessment of a civil penalty,

(4) criminal action or injunctive relief.

(b) Enforcement Procedures Against Sources Which Fall in Categories A and B, as Defined in Regulation .0703 of this Section. An attempt will be made to negotiate special orders by consent pursuant to G.S. 143-215.110 for sources which fall in categories A and B:

(1) Procedure for issuing special orders by consent:

(A) Notify source by letter of the impending deadline, probable violation, and desire to resolve matter by issuance of a special order by consent;

(B) Negotiate with source (this would include compliance schedules, and such special conditions as needed and filing of documentation by source);

(C) Submit proposed order to EPA for approval (point sources for sulfur dioxide and TSP only);

(D) Publish notice of proposed special orders extending date for compliance; One public notice may be used to cover several proposed special orders;

(E) Orders will be submitted to the Environmental Management Commission for approval and execution:

(F) In case of school systems, one order may be issued to cover a group of schools in a given county, if the facts are the same for each.

(2) Procedure for Issuing Special Orders. If a source in categories A or B refuses to enter into a special order by consent, then a special order pursuant to an adjudicatory hearing will be issued. The procedure is the same as for special order by consent except for addition of the following:

(A) request EPA to issue section 114 letter;

(B) request the Director, DEM, to designate a hearing officer to conduct adjudicatory hearings;

(C) issue public notice of hearing which includes proposed special order and evidence substantiating noncompliance; if party accepts special order without hearing, it is then a special order by consent;

(D) hearing officer holds hearing, and depending upon findings may issue special order.

(c) Enforcement Procedures Against Sources in Category C, as defined in Regulation .0703 of this Section. Enforcement procedures against sources in Category C will be a special order by consent or a special order and assessment of civil penalty by the director. The procedure would be exactly the same as that described in Subdivision (b) of this Regulation, except that the penalty would be assessed at the time the special order by consent or the special order is issued. Criminal action and injunctive relief will be reserved for use against those sources which either violate special orders and/or have shown no cooperation with complying with air quality standards from the time the program was first initiated until June 1, 1975. Action against those sources will be filed as soon as possible after June 1, 1975.

(d) Enforcement Procedures Against Sources in Category D, as Defined in Regulation .0703 of this Section. No compliance extension will be approved unless the source meets the requirements of Section 110 (f) of the Clean Air Act Amendments. If the source satisfies the section 110 requirements, enforcement will proceed under any of the four procedures in Subdivision (a) of this Section.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.110;
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(2.0) .0705 DOCUMENTATION FOR SPECIAL ORDERS

Documentation procedures shall consist of the following:

(1) Establish five increments of progress for the attainment of control strategies;

(2) Contract date made by July 1, 1975, for the installation of control equipment;

(3) In cases where delays have occurred, due to non-availability of control equipment, obtain documentation from supplier;

(4) In cases where lack of clean fuel is the case of non-

compliance, show documented proof by at least two fuel suppliers that clean fuel is not available;

(5) Evidence that emissions levels will be maintained at, or below present levels, pending completion of control installations;

(6) Furnish report on all increments of progress;

(7) Conference with state and EPA concerning adequate schedule to complete the attainment of control concerning each source;

(8) Source is to proceed as expeditiously as possible toward obtaining compliance, with dates not to exceed July 1, 1977, unless a longer schedule is necessary, due to the magnitude of control strategy.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.110;
Eff. February 1, 1976.

(16.0) .0706 PUBLIC PARTICIPATION

(a) Notice of Intent to Issue Special Orders by Consent

(1) Notice of intent to issue special orders by consent (SOC) shall be published at least once in the five largest-circulation newspapers of the state at least 45 days prior to submittal of the SOCs to the Environmental Management Commission for approval. The notice shall provide for 30-day period in which public comment may be submitted to the air quality section. Notices shall contain the following minimum information: name of source (s), location (city and/or county), and final compliance date.

(2) At the close of the 30-day comment period, the air quality and enforcement sections will review any comments received to determine if significant public interest exists to warrant a public hearing. However, the determination need not wait until close of the 30-day period if a substantial number of public comments are received early in the comment period.

(3) Notices may be issued for more than one source, but will be listed in the notice alphabetically by counties.

(b) Public Hearings.

(1) On Proposed Special Orders by Consent

(A) If significant public interest is expressed in the proposed

issuance of special order by consent, the director shall be requested to convene a hearing utilizing the same procedures as spelled out in Regulation .0402 of Subchapter 2I, Title 15, NCAC, and to designate the hearing officer (s).

(B) Notice of the hearing shall be given 20 days in advance of the hearing to all persons who submitted comments on the proposed order, and shall be published and contain the minimum information listed in Subdivision (a) (1) of this Regulation.

(2) On Proposed Special Orders. An administrative hearing must be held in accordance with Section .0300, Subchapter 2I, Title 15, prior to the issuance of every special order.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.110;
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(2.0) .0707 EXTENSIONS

(a) The commission reiterates its intent that all special orders and special orders by consent issued under this Section be enforced by the Director, Division of Environmental Management, pursuant to enforcement procedures contained in G.S. 143-215.114 and 15 NCAC 2J. Accordingly, extensions are extraordinary procedures available to sources solely in the discretion of the Environmental Management Commission.

(b) Requests by sources for extensions shall be submitted to the Director, Division of Environmental Management. Such requests must be in writing and include, at the least, the following information:

(1) length of extension requested, and

(2) reasons for requesting extension.

(c) The Director, Division of Environmental Management, shall refer the requests to the commission only when he finds:

(1) The source has demonstrated that the inability of the source to comply with its special order or special order by consent is due to extenuating circumstances clearly beyond the control of the source which could not have been prevented by the source had reasonable foresight been exercised;

(2) Cost to the source was not the cause of the inability of the source to comply; and

(3) The request was submitted at least 30 days prior to any interim date that would cause the final date not to be met or at least 45 days prior to any final date.

(d) When any extension request is granted by the Environmental Management Commission, the procedures applicable to issuance of special orders by consent shall be followed as provided in this section.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.110;
Eff. December 1, 1976.

(10.0) SECTION .0800 - COMPLEX SOURCES

(2.0) .0801 PURPOSE AND SCOPE

(a) The purpose of this Section is to set forth requirements of the commission relating to construction or modification of a facility, building, structure, or installation or combination thereof which may result in violation of ambient air quality standards.

(b) This Section shall apply to any person who proposes to construct or modify any facilities which would result in:

(1) open parking lots, including shopping center lots having 1,500 or more vehicle capacity, and parking decks, including shopping center decks and parking garages having capacity for 750 or more vehicles;

(2) subdivisions, housing developments, apartment complexes, and trailer courts having 500 or more units resulting in a population density of 7,680 per square mile (12 persons per acre) or more;

(3) stadiums and sports arenas having a seating capacity of 25,000 or more, or 8,000 vehicle parking spaces or more;

(4) drive-in theaters having 700 or more parking spaces; or

(5) amusement parks and recreation areas designed to serve 25,000 persons per day or more, or to accommodate parking of 8,000 vehicles or more.

(c) For purposes of this Section any facility which on November 15, 1973, is under construction, or is being installed, or is the subject of a contract for construction, installation or purchase, shall not be considered to be a new air contaminant source.

(d) Approval to construct or modify an indirect source shall not

relieve any owner or operator of the responsibility to comply with the state control strategy and all local and state regulations which are part of the North Carolina implementation plan.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.109;
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(3.0) .0802 PERMITS

(a) No person shall construct or modify any facility set forth in Regulation .0801 (b) (1) to .0801 (b) (5) of this Section until such person has applied for and received a permit from the commission, and has complied with any and all terms and conditions therein.

(b) All applications for permits to construct or modify a complex source shall be made on forms provided by the commission and may include, at the discretion of the commission, a requirement that the owner of the source conduct air quality monitoring and perform dispersion and diffusion analysis to predict impact of proposed construction or modification on air quality.

(c) Prior to approving or disapproving the construction or modification of any complex source, the information submitted by the owner or operator, as well as the agency's analysis of the effect on ambient air quality (including the agency's preliminary approval or disapproval), shall be made available for public inspection in at least one location in the region affected. This shall be accomplished by publishing a notice by prominent advertisement in the region affected, and shall allow a 30-day period for submittal of public comment.

(d) The commission shall not approve any application for a permit which would:

(1) interfere with the attainment or maintenance of any ambient air quality standard, or

(2) result in violation of applicable portions of the implementation plan control strategy.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.109;
Eff. February 1, 1976.

(12.0) .0803 HIGHWAY PROJECTS

In accordance with the National Environmental Policy Act, and the North

Carolina Environmental Policy Act, assessments regarding highway projects will be reviewed. If there is no assessment, or if an assessment fails to complement the purpose of this Regulation due to negative declaration, improper address to the air problem, insufficient information, or failure in abatement proceedings, or if the environmental impact assessment fails to show that the highway project will not result in violations of applicable portions of the control strategy, and will not interfere with attainment or maintenance of a national standard, then the following regulatory provisions shall apply:

(1) No person shall construct or modify any highway if that highway will result in a contravention of ambient air quality standards;

(2) No person shall construct or modify any highway with an expected maximum traffic volume of 2,000 vehicles per hour or more within 10 years, unless or until such person has applied for and received a permit from the commission, and has complied with any terms and conditions therein.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.109;
Eff. February 1, 1976.

(10.0) .0804 AIRPORT FACILITIES

No person shall construct or modify any airport facility expected to have 100,000 or more annual aircraft operations, or 45 or more peak-hour aircraft operations (one operation equals one takeoff, or one landing) within 10 years, unless or until such person has applied for and received a permit from the commission, and has complied with any and all terms and conditions therein.

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.109;
Eff. February 1, 1976

(3.0) SECTION .0600 - AIR QUALITY PERMITS

(2.0) .0601 PURPOSE AND SCOPE

(a) This Section implements G.S. 143-215.108 and 143-215.109 concerning permits for sources of air pollution and complex sources.

(b) After the effective date of any air quality or emission control standards established pursuant to G.S. 143-215.107, no person shall do any of the following things or carry out any of the following activities which contravene or will be likely to contravene such standards until or unless such person shall have applied for and

shall have received from the commission a permit therefor and shall have complied with such conditions, if any, as are prescribed by such permit:

(1) establish or operate any air contaminant source;

(2) build, erect, use or operate any equipment which may result in the emission of air contaminants or which is likely to cause air pollution;

(3) alter or change the construction or method of operation of any equipment or process from which air contaminants are or may be emitted;

(4) enter into a contract for the construction and installation of any air cleaning device or allow or cause such device to be constructed, installed or operated.

(c) For the purposes of these regulations, all sources of any air contaminant for which there is an applicable air quality or emission control standard are considered likely to contravene the applicable standard and must apply for a permit as required in (b) of this Regulation, except that the commission has determined the following sources or activities are not likely to contravene any applicable ambient air or emission control standard, therefore are not required to obtain a permit:

(1) air conditioning or comfort ventilation systems which do not transport, remove, or exhaust product or by-product to the atmosphere;

(2) combustion sources serving heating systems which provide comfort heat for residences;

(3) laboratory equipment used for chemical or physical analysis;

(4) nonstationary internal combustion engines and vehicles;

(5) equipment which emits only nitrogen, oxygen, carbon dioxide, and/or water vapor;

(6) maintenance, repair, or replacement of existing equipment that does not result in an increase to the emission of air contaminants;

(7) smudge pots for orchards or small outdoor heating devices to prevent freezing of plants;

(8) fuel burning equipment firing exclusively gaseous fuel with the total heat input rating of 250 million BTU per hour or less;

(9) fuel burning equipment firing exclusively No. 1 or No. 2 fuel oil with the total heat input rating of 100 million BTU per hour or less;

(10) fuel burning equipment firing a mixture, the components of which may be only gaseous fuel, No. 1 fuel oil or No. 2 fuel oil, in any proportion, with the total heat input rating of 100 million BTU per hour or less.

(d) For any existing or new sources included in (b) of this Regulation and not specified in (c) of this Regulation, any person may request in writing that the director make a determination that the subject source will neither contravene nor will be likely to contravene applicable ambient air quality or emission control standards. This request shall be accompanied with documentation supporting a showing that emission control standards will not be, nor are likely to be contravened. If the documentation submitted with the request shows to the satisfaction of the director that emission control standards will not be, nor are likely to be contravened, a determination shall be made that a permit is not required, unless the staff makes a showing that, notwithstanding emission control standards, the standards for ambient air quality will be, or are likely to be contravened.

(e) This Section applies to the establishment or operation of any complex source subject to Section .0800 of Subchapter 2D of this Title. All persons who establish or operate such complex source shall be required to obtain a permit as provided in this Section, provided if such source is excepted in Section .0800 of Subchapter 2D of this Title, no permit shall be required.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.108; 143-215.109; Eff. February 1, 1976.

(1.0) .0602 DEFINITIONS

Unless the context otherwise requires, the terms used herein shall be used as defined in G.S. 143-213 and as follows:

(1) Director -- means the Director of the Division of Environmental Management;

(2) Plans and specifications -- the completed application (AQ-22 or AQ-81) and any other documents as are required to

define the operating conditions of the air contaminant emission source;

(3) To alter or change -- to modify equipment or processes of existing facilities; This shall include equipment additions, deletions, adjustments, and/or operational practices which would increase emissions or affect the compliance status of the equipment or process;

(4) Source -- the origin of emission of an air contaminant;

(5) Staff -- means the air quality section, division of environmental management, or its successor.

History Note: Statutory Authority G.S. 143-213;
143-215.3 (a) (1);
Eff. February 1, 1976.

(3.0) .0603 APPLICATIONS

(a) Permit application shall be made in triplicate on official forms of the commission, and shall include plans and specifications setting forth all necessary data and information as required by the application form; air contaminant sources -- Form AQ-22, complex sources -- Form AQ-81. These forms may be obtained by writing the air quality section at the address in (b) of this Rule.

(b) Permit application shall be filed in writing with the Director, Division of Environmental Management, Department of Natural and Economic Resources, P.O. Box 27687, Raleigh, N.C. 27611.

(c) Application for renewal of an existing permit may be made by letter to the director, if no alteration or modification has been made to the permitted source subsequent to the issuance of the original permit.

(d) The director is authorized to request such information from an applicant and to conduct such inquiry or investigation as he may deem necessary, and to require the submission of plans and specifications prior to acting on any permit application.

(e) Prior to issuing any permit for a source on the Code of Federal Regulations list of sources requiring a review for prevention of significant deterioration (40 CFR 52.21 (d) (1)), or for any other source that may be designated by the director, the information submitted by the owner or operator, as well as the agency's analysis of the effect on ambient air quality, shall be made available for public inspection in at least one location in the region affected. This shall be accomplished by publishing a

notice by prominent advertisement in the region affected and shall allow a 30-day period for submittal of public comment. Confidential material will be handled in accordance with G.S. 143-215.3 (a) (2).

History Note: Statutory Authority G.S. 143-215.3 (a) (1);
143-215.108; 143-215.109;
Eff. February 1, 1976;
Amended Eff. December 1, 1976.

(3.0) .0604 FINAL ACTION ON PERMIT APPLICATIONS

(a) The director shall review and take final action on all applications within 90 days following receipt of a completed application or required additional information. All permits, renewals, or decisions denying permits shall be in writing. Failure of the director to take action on an application for a permit within the 90-day period shall be deemed as approval of such application.

(b) The director is authorized to:

(1) issue a permit or a renewal containing such conditions as are necessary to effectuate the purposes of G.S. Chapter 143, Article 21B;

(2) modify or revoke any permit upon giving 60 days notice to the person affected;

(3) deny a permit application where necessary to effectuate the purposes of G.S. Chapter 143, Article 21B.

(c) Any person whose application for a permit or renewal is denied or is granted subject to conditions which are unacceptable to such person or whose permit is modified or revoked shall have the right to a hearing upon making demand therefore within 30 days following the giving of notice by the director as to his decision upon such application.

History Note: Statutory Authority G.S. 143-215.108;
143-215.109; 143-215.3 (a) (1);
Eff. February 1, 1976.

(3.0)
(15.0) .0605 ISSUANCE, REVOCATION, AND ENFORCEMENT OF PERMITS

(a) Permits shall be issued or renewed for a period of time deemed reasonable by the director, but in no case shall the period exceed five years.

(b) Any permit or permit renewal issued pursuant to this Regulation is subject to revocation or modification upon a determination that information contained in the application or presented in support thereof is incorrect, conditions under which the permit renewal was granted have changed, or violations of conditions contained in the permit have occurred.

(c) Failure to apply for and obtain a permit required by this Section or any violation of or failure to act in accordance with the terms, conditions, or requirements of any permit or renewal shall subject the responsible person (s) to the enforcement sanctions of G.S. 143-215.114.

History Note: Statutory Authority G.S. 143-215.3 (a) (1); 143-215.108; 143-215.109; 143-215.114; Eff. February 1, 1976.

(2.0) .0606 DELEGATION OF AUTHORITY

The director is authorized to delegate the processing of permit applications and the issuance of permits to the Air Quality Section Chief, the air quality regional engineers, or the Air Quality Chief Engineer as he deems appropriate. This delegation shall not include the authority to deny a permit application or to revoke, modify, or suspend a permit.

History Note: Statutory Authority G.S. 143-215.3 (a) (1), (4); Eff. February 1, 1976.

(2.0) .0607 COPIES OF REFERENCED FEDERAL REGULATIONS

Copies of applicable Code of Federal Regulations sections referred to in this Section are available for public inspection at Department of Natural and Economic Resources field offices, air quality section. They are: Western Field Office, Interchange Building, 159 Woodfin Street, Post Office Box 370, Asheville, North Carolina 28802; North Piedmont Field Office, 8003 Silas Creek Parkway Extension, Winston-Salem, North Carolina 27106; South Piedmont Field Office, 119 North Main Street, Mooresville, North Carolina 28115; North Central Field Office, 3800 Barrett Drive, Post Office Box 27687, Raleigh, North Carolina 27611; South Central Field Office, Wachovia Building, Suite 714, Fayetteville, North Carolina 28301; Northeastern Field Office, 1502 North Market Street, Post Office Box 1129, Washington, North Carolina 27889; Southeastern Field Office, 3143 Wrightsville Avenue, Wilmington, North Carolina 28401.

Copies of such regulations can be made at these field offices for ten cents ($0.10) per page.

History Note: Statutory Authority G.S. 150A-14; Eff. December 1, 1976.

FEDERALLY PROMULGATED

REGULATIONS

(17.0) 52.1778 Prevention of Significant Deterioration

(b) Definitions. For the purposes of this section:

(1) "Facility" means an identifiable piece of process equipment. A stationary source is composed of one or more pollutant-emitting facilities.

(2) The phrase "Administrator" means the Administrator of the Environmental Protection Agency or his designated representative.

(3) The phrase "Federal Land Manager" means the head, or his designated representative, of any Department or Agency of the Federal Government which administers federally-owned land, including public domain lands.

(4) The phrase "Indian Reservation" means any federally-recognized reservation established by Treaty, Agreement, Executive Order, or Act of Congress.

(5) The phrase "Indian Governing Body" means the governing body of any tribe, band, or group of Indians subject to the jurisdiction of the United States and recognized by the United States as possessing power of self-government.

(6) "Construction" means fabrication, erection or installation of a stationary source.

(7) "Commenced" means that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

(c) Area designation and deterioration increment

(1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the provisions shall also be applicable to all lands owned by the Federal Government and Indian Reservations located in such State. The provisions of this paragraph do not apply in those counties or other functionally equivalent areas that pervasively exceeded any national ambient air quality standards during 1974 for sulfur dioxide or particulate matter and then only with respect to such pollutants. States may notify the Administrator at any time of those areas which exceeded the national standards during 1974 and therefore are exempt from the requirements of this paragraph.

(2) (i) For purposes of this paragraph, areas designated as Class I or II shall be limited to the following increases in pollutant concentration occurring since January 1, 1975:

Pollutant	Area Designations: Class I (ug/m^3)	Area Designations: Class II (ug/m^3)
Particulate matter:		
Annual geometric mean	5	10
24-hr maximum	10	30
Sulfur dioxide:		
Annual arithmetic mean	2	15
24-hr maximum	5	100
3-hr maximum	25	700

(ii) For purposes of this paragraph, areas designated as Class III shall be limited to concentrations of particulate matter and sulfur dioxide no greater than the national ambient air quality standards.

(iii) The air quality impact of sources granted approval to construct or modify prior to January 1, 1975 (pursuant to the approved new source review procedures in the plan) but not yet operating prior to January 1, 1975, shall not be counted against the air quality increments specified in paragraph (c) (2) (i) of this section.

(3) (i) All areas are designated Class II as of the effective date of this paragraph. Redesignation may be proposed by the respective States, Federal Land Manager, or Indian Governing Bodies, as provided below, subject to approval by the Administrator.

(ii) The State may submit to the Administrator a proposal to redesignate areas of the State Class I, Class II, or Class III, provided that:

(a) At least one public hearing is held in or near the area affected and this public hearing is held in accordance with procedures established in 51.4 of this chapter, and

(b) Other States, Indian Governing Bodies, and Federal Land Managers whose lands may be affected by the proposed redesignation are notified at least 30 days prior to the public hearing, and

(c) A discussion of the reasons for the proposed redesignation is available for public inspection at least 30 days prior to the hearing and the notice announcing the hearing contains appropriate notification of the availability of such discussion, and

(d) The proposed redesignation is based on the record of the State's hearing, which must reflect the basis for the proposed redesignation, including consideration of (1) growth anticipated in the area, (2) the social, environmental, and economic effects of such redesignation upon the area being proposed for redesignation and upon other areas and States, and (3) any impacts of such proposed redesignation upon regional or national interests.

(e) The redesignation is proposed after consultation with the elected leadership of local and other substate general purpose governments in the area covered by the proposed redesignation.

(iii) Except as provided in paragraph (c) (3) (iv) of this section, a State in which lands owned by the Federal Government are located may submit to the Administrator a proposal to redesignate such lands Class I, Class II, or Class III in accordance with subdivision (ii) of this subparagraph provided that:

(a) The redesignation is consistent with adjacent State and privately owned land, and

(b) Such redesignation is proposed after consultation with the Federal Land Manager.

(iv) Notwithstanding subdivision (iii) of this subparagraph, the Federal Land Manager may submit to the Administrator a proposal to redesignate any Federal lands to a more restrictive designation than would otherwise be applicable provided that:

(a) The Federal Land Manager follows procedures equivalent to those required of States under paragraph (c) (3) (ii) and,

(b) Such redesignation is proposed after consultation with the State(s) in which the Federal Land is located or which border the Federal Land.

(v) Nothing in this section is intended to convey authority to the States over Indian Reservations where States have not assumed such authority under other laws nor is it intended to deny jurisdiction which States have assumed

under other laws. Where a State has not assumed jurisdiction over an Indian Reservation the appropriate Indian Governing Body may submit to the Administrator a proposal to redesignate areas Class I, Class II, or Class III, provided that:

(a) The Indian Governing Body follows procedures equivalent to those required of States under paragraph (c) (3) (ii) and,

(b) Such redesignation is proposed after consultation with the State(s) in which the Indian Reservation is located or which border the Indian Reservation and, for those lands held in trust, with the approval of the Secretary of the Interior.

(vi) The Administrator shall approve, within 90 days, any redesignation proposed pursuant to this subparagraph as follows:

(a) Any redesignation proposed pursuant to subdivisions (ii) and (iii) of this subparagraph shall be approved unless the Administrator determines (1) that the requirements of subdivisions (ii) and (iii) of this subparagraph have not been complied with, (2) that the State has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph, or (3) that the State has not requested and received delegation of responsibility for carrying out the new source review requirements of paragraphs (d) and (e) of this section.

(b) Any redesignation proposed pursuant to subdivision (iv) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (iv) of this subparagraph have not been complied with, or (2) that the Federal Land Manager has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

(c) Any redesignation submitted pursuant to subdivision (v) of this subparagraph shall be approved unless he determines (1) that the requirements of subdivision (v) of this subparagraph have not been complied with, or (2) that the Indian Governing Body has arbitrarily and capriciously disregarded relevant considerations set forth in subparagraph (3) (ii) (d) of this paragraph.

(d) Any redesignation proposed pursuant to this paragraph shall be approved only after the Administrator has solicited written comments from affected Federal agencies and Indian Governing Bodies and from the public on the proposal.

(e) Any proposed redesignation protested to the proposing State, Indian Governing Body, or Federal Land Manager and to the Administrator by another State or Indian Governing Body because of the effects upon such protesting State or Indian Reservation shall be approved by the Administrator only if he determines that in his judgment the redesignation appropriately balances considerations of growth anticipated in the area proposed to be redesignated; the social, environmental and economic effects of such redesignation upon the area being redesignated and upon other areas and States; and any impacts upon regional or national interests.

(f) The requirements of paragraph (c) (3) (vi) (a) (3) that a State request and receive delegation of the new source review requirements of this section as a condition to approval of a proposed redesignation, shall include as a minimum receiving the administrative and technical functions of the new source review. The Administrator will carry out any required enforcement action in cases where the State does not have adequate legal authority to initiate such actions. The Administrator may waive the requirements of paragraph (c) (3) (vi) (a) (3) if the State Attorney-General has determined that the State cannot accept delegation of the administrative/technical functions.

(vii) If the Administrator disapproves any proposed area designation under this subparagraph, the State, Federal Land Manager or Indian Governing Body, as appropriate, may resubmit the proposal after correcting the deficiencies noted by the Administrator or reconsidering any area designation determined by the Administrator to be arbitrary and capricious.

(d) Review of new sources

(1) The provisions of this paragraph have been incorporated by reference into the applicable implementation plans for various States, as provided in Subparts B through DDD of this part. Where this paragraph is so incorporated, the requirements of this paragraph apply to any new or modified stationary source of the type identified below which has not commenced construction or modification prior to June 1, 1975 except as specifically provided below. A

source which is modified, but does not increase the amount of sulfur oxides or particulate matter emitted, or is modified to utilize an alternative fuel, or higher sulfur content fuel, shall not be subject to this paragraph.

(i) Fossil-Fuel Steam Electric Plants of more than 1000 million B.T.U. per hour heat input.

(ii) Coal Cleaning Plants.

(iii) Kraft Pulp Mills.

(iv) Portland Cement Plants.

(v) Primary Zinc Smelters.

(vi) Iron and Steel Mills.

(vii) Primary Aluminum Ore Reduction Plants.

(viii) Primary Copper Smelters.

(ix) Municipal Incinerators capable of charging more than 250 tons of refuse per 24 hour day.

(x) Sulfuric Acid Plants.

(xi) Petroleum Refineries.

(xii) Lime Plants.

(xiii) Phosphate Rock Processing Plants.

(xiv) By-Product Coke Oven Batteries.

(xv) Sulfur Recovery Plants.

(xvi) Carbon Black Plants (furnace process).

(xvii) Primary Lead Smelters.

(xviii) Fuel Conversion Plants.

(xix) Ferroalloy production facilities commencing construction after October 5, 1975.

(2) No owner or operator shall commence construction or modification of a source subject to this paragraph unless the Administrator determines that, on the basis of information submitted pursuant to subparagraph (3) of this paragraph:

(i) The effect on air quality concentration of the source or modified source, in conjunction with the effects of growth and reduction in emissions after January 1, 1975, of other sources in the area affected by the proposed source, will not violate the air quality increments applicable in the area where the source will be located nor the air quality increments applicable in any other areas. The analysis of emissions growth and reduction after January 1, 1975, of other sources in the areas affected by the proposed source shall include all new and modified sources granted approval to construct pursuant to this paragraph; reduction in emissions from existing sources which contributed to air quality during all or part of 1974; and general commercial, residential, industrial, and other sources of emissions growth not exempted by paragraph (c) (2) (111) of this section which has occurred since January 1, 1975.

(ii) The new or modified source will meet an emission limit, to be specified by the Administrator as a condition to approval, which represents that level of emission reduction which would be achieved by the application of best available control technology, as defined in 52.01 (f), for particulate matter and sulfur dioxide. If the Administrator determines that technological or economic limitations on the application of measurement methodology to a particular class of sources would make the imposition of an emission standard infeasible, he may instead prescribe a design or equipment standard requiring the application of best available control technology. Such standard shall to the degree possible set forth the emission reductions achievable by implementation of such design or equipment, and shall provide for compliance by means which achieve equivalent results.

(iii) With respect to modified sources, the requirements of subparagraph (2) (ii) of this paragraph shall be applicable only to the facility or facilities from which emissions are increased.

(3) In making the determinations required by paragraph (d) (2) of this section, the Administrator shall, as a minimum, require the owner or operator of the source subject to this paragraph to submit: site information, plans, description, specifications, and drawings showing the design of the source; information necessary to determine the impact that the construction or modification will have on sulfur dioxide and particulate matter air quality levels; and any other information necessary to determine that best available control technology will be applied. Upon request of the Administrator, the owner or operator of the source shall provide information on the nature and extent of general commercial, residential, industrial, and other growth which has occurred in the area affected by the source's emissions (such area to be specified by the

Administrator) since January 1, 1975.

(4) (i) Where a new or modified source is located on Federal Lands, such source shall be subject to the procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be in addition to applicable procedures conducted by the Federal Land Manager for administration and protection of the affected Federal Lands. Where feasible, the Administrator will coordinate his review and hearings with the Federal Land Manager to avoid duplicate administrative procedures.

(ii) New or modified sources which are located on Indian Reservations shall be subject to procedures set forth in paragraphs (d) and (e) of this section. Such procedures shall be administered by the Administrator in cooperation with the Secretary of the Interior with respect to lands over which the State has not assumed jurisdiction under other laws.

(iii) Whenever any new or modified source is subject to action by a Federal Agency which might necessitate preparation of an environmental impact statement pursuant to the National Environmental Policy Act (42 U.S.C. 4321), review by the Administrator conducted pursuant to this paragraph shall be coordinated with the broad environmental reviews under that Act, to the maximum extent feasible and reasonable.

(5) Where an owner or operator has applied for permission to construct or modify pursuant to this paragraph and the proposed source would be located in an area which has been proposed for redesignation to a more stringent class (or the State, Indian Governing Body, or Federal Land Manager has announced such consideration), approval shall not be granted until the Administrator has acted on the proposed redesignation.

(e) Procedures for public participation

(1) (i) Within 20 days after receipt of an application to construct, or any addition to such application, the Administrator shall advise the owner or operator of any deficiency in the information submitted in support of the application. In the event of such a deficiency, the date of receipt of the application for the purpose of paragraph (e) (1) (ii) of this section shall be the date on which all required information is received by the Administrator.

(ii) Within 30 days after receipt of a complete application, the Administrator shall:

(a) Make a preliminary determination whether the source should be approved, approved with conditions, or disapproved.

(b) Make available in at least one location in each region in which the proposed source would be constructed, a copy of all materials submitted by the owner or operator, a copy of the Administrator's preliminary determination and a copy or summary of other materials, if any, considered by the Administrator in making his preliminary determination; and

(c) Notify the public, by prominent advertisement in newspaper of general circulation in each region in which the proposed source would be constructed, of the opportunity for written public comment on the information submitted by the owner or operator and the Administrator's preliminary determination on the approvability of the source.

(iii) A copy of the notice required pursuant to this subparagraph shall be sent to the applicant and to officials and agencies having cognizance over the locations where the source will be situated as follows: State and local air pollution control agencies, the chief executive of the city and county; any comprehensive regional land use planning agency; and any State, Federal Land Manager or Indian Governing Body whose lands will be significantly affected by the source's emissions.

(iv) Public comments submitted in writing within 30 days after the date such information is made available shall be considered by the Administrator in making his final decision on the application. No later than 10 days after the close of the public comment period, the applicant may submit a written response to any comments submitted by the public. The Administrator shall consider the applicant's response in making his final decision. All comments shall be made available for public inspection in at least one location in the region in which the source would be located.

(v) The Administrator shall take final action on an application within 30 days after the close of the public comment period. The Administrator shall notify the applicant in writing of his approval, conditional approval, or denial of the application, and shall set forth his reasons for conditional approval or denial. Such notification shall be made available for public inspection in at least one location in the region in which the source would be located.

(vi) The Administrator may extend each of the time periods specified in paragraph (e) (1) (ii), (iv), or (v) of this section by no more than 30 days or such other period as agreed to by the applicant and the Administrator.

(2) Any owner or operator who constructs, modifies, or operates a stationary source not in accordance with the application, as approved and conditioned by the Administrator, or any owner or operator of a stationary source subject to this paragraph who commences construction or modification after June 1, 1975, without applying for and receiving approval hereunder, shall be subject to enforcement action under section 113 of the Act.

(3) Approval to construct or modify shall become invalid if construction or expansion is not commenced within 18 months after receipt of such approval or if construction is discontinued for a period of 18 months or more. The Administrator may extend such time period upon a satisfactory showing that an extension is justified.

(4) Approval to construct or modify shall not relieve any owner or operator of the responsibility to comply with the control strategy and all local, State, and Federal regulations which are part of the applicable State Implementation Plan.

(f) Delegation of authority

(1) The Administrator shall have the authority to delegate responsibility for implementing the procedures for conducting source review pursuant to paragraphs (d) and (e), in accordance with subparagraphs (2), (3), and (4) of this paragraph.

(2) Where the Administrator delegates the responsibility for implementing the procedures for conducting source review pursuant to this section to any Agency, other than a regional office of the Environmental Protection Agency, the following provisions shall apply:

(i) Where the agency designated is not an air pollution control agency, such agency shall consult with the appropriate State and local air pollution control agency prior to making any determination required by paragraph (d) of this section. Similarly, where the agency designated does not have continuing responsibilities for managing land use, such agency shall consult with the appropriate State and local agency which is primarily responsible for managing land use prior to making any determination required by paragraph (d) of this section.

(ii) A copy of the notice pursuant to paragraph (e) (1) (ii) (c) of this section shall be sent to the Administrator through the appropriate regional office.

(3) In accordance with Executive Order 11752, the Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be delegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are owned or operated by the Federal government or for new or modified sources located on Federal lands; except that, with respect to the latter category, where new or modified sources are constructed or operated on Federal lands pursuant to leasing or other Federal agreements, the Federal land Manager may at his discretion, to the extent permissible under applicable statutes and regulations, require the lessee or permittee to be subject to a designated State or local agency's procedures developed pursuant to paragraphs (d) and (e) of this section.

(4) The Administrator's authority for implementing the procedures for conducting source review pursuant to this section shall not be redelegated, other than to a regional office of the Environmental Protection Agency, for new or modified sources which are located on Indian reservations except where the State has assumed jurisdiction over such land under other laws, in which case the Administrator may delegate his authority to the States in accordance with subparagraphs (2), (3), and (4) of this paragraph.

(39 FR 42514, Dec. 5, 1974; 40 FR 2802, Jan. 16, 1975, as amended at 40 FR 24535, June 9, 1975; 40 FR 25005, June 12, 2975; 40 FR 42012, Sept. 10, 1975)